## DOCTOR OF PHILOSOPHY

# Exploring Environmental Justice in Small-Scale Hydroelectricity Power Plant (HPP) Development in Rural Turkey

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# EXPLORING ENVIRONMENTAL JUSTICE IN SMALL-SCALE HYDROELECTRICITY POWER PLANT (HPP) DEVELOPMENT IN RURAL TURKEY

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| BOO | Build-Own-Operate |
| BOT | Build-Operate-Transfer |
| CTF | Clean Technology Fund |
| DP | Democrat Party |
| DPT | *Devlet Planlama Teşkilatı* (Turkish acronym of State Planning Organisation) |
| DSİ | *Devlet Su İşleri* (Turkish acronym of State Hydraulic Works) |
| EEC | European Economic Community |
| EIA | Environmental Impact Assessment |
| EIB | European Investment Bank |
| EIE | *Elektrik İşleri Etüd İdaresi* (Turkish acronym of Directorate of Electrical Power Resources Survey and Development Organisation) |
| EJOLT | Environmental Justice Organizations, Liabilities and Trade |
| EPA | The United States Environmental Protection Agency |
| EPDK | *Elektik Piyasasi Denetleme Kurumu* (Turkish acronym of Electricity Market Regulatory Authority) |
| EU | European Union |
| FCCI | Fethiye Chambers of Commerce and Industry |
| FSKP | *Fethiye-Saklıkent Koruma Platformu* (Turkish acronym of Fethiye-Saklıkent Protection Platform) |
| GAP | *Güneydoğu Anadolu Projesi* (Turkish acronym of Southeast Anatolia Project) |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| HPP | Hydroelectricity Power Plant |
| IEA | International Energy Agency |
| IMF | International Monetary Fund |
| ISI | Import Substitution Industrialisation |
| IUCN | The International Union for Conservation of Nature |
| JDP | Justice and Development Party |

| | |
|---|---|
| LULU | Locally Unwanted Land Use |
| MGM | *Meteoroloji Genel Müdürlüğü* (Turkish acronym of Directorate General of Meteorology) |
| MP | Motherland Party |
| MW | Mega Watt |
| NATO | North Atlantic Treaty Organization |
| NGO | Non-Governmental Organisation |
| NIMBY | Not-In-My-Back-Yard |
| NSP | National Salvation Party |
| OCK | *Özel Çevre Koruma Bölgesi* (Turkish acronym of Special Environment Protection Areas) |
| OECD | Organisation for Economic Co-operation and Development |
| PCB | Polychlorinated biphenyl |
| PKK | Kurdistan Worker's Party |
| RPP | Republican People's Party |
| SAP | Structural Adjustment Plans |
| TMMOB | *Türkiye Mühendis ve Mimar Odaları Birliği* (Turkish acronym of the Union of Chambers of Turkish Engineer and Architects) |
| TOOR | Transfer of Operation Rights |
| TurkStat | Republic of Turkey, Institute of Statistics |
| TV | Television |
| TWh | TeraWatt/hour |
| UK | United Kingdom |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFCCC | United Nations Framework Convention on Climate Change |
| US | The United States of America |
| WB | The World Bank |
| WCD | World Commission on Dams |
| WWF | World Wildlife Fund |
| YKP | *Yuvarlakçay Koruma Platformu* (Turkish acronym of Yuvarlakçay Protection Platform) |

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**Signed Declaration for Submission of Postgraduate Thesis**

I, the candidate, hereby acknowledge:

(a) I am the author of this thesis;
(b) Unless other stated, all references cited have been consulted;
(c) The work of which this thesis is a record has been done by the candidate;
(d) The work has not been previously accepted for a higher degree.

Signed: Date

**Signed Statement by Supervisor**

I, the supervisor, hereby acknowledge that the conditions of the relevant Ordinance and Regulations have been fulfilled.

Signed:
Date:

## ABSTRACT

This research examines the recent hydroelectricity power plant (HPP) phase of Turkey's water management within the context of environmental justice. Approximately 2000 small-scale HPPs have been planned and/or constructed in Turkey, mostly in its rural parts since 2001. Yet these HPPs have aroused socio-environmental debates at the construction sites. On the one hand, due to their socio-economic and environmental impacts, technocratic nature and top-down implementation, HPPs have been mostly met with frustration by the local communities. On the other hand, there have been HPP cases consented by the locals when they have been assured with minimal socio-environmental impacts and/or financially compensated. This research departs from such public reactions against HPPs in which justice is viewed as the key notion in shaping HPP processes and subsequent public reactions.

This research essentially aims at deconstructing Turkey's HPP process within the context of making environmental justice claims at multiple scales to assess this departure point. The conceptual framework of this research argues that making an environmental justice claim should include three components of 'justice', 'process' and 'evidence'. For 'justice', patterns of the ideal environmental justice were discussed within the context of distributive, recognitional and participative (procedural) justice. In explaining the 'process' of how current socio-environmental (in)equalities bound to HPPs are conceived, Turkey's water policies and discourses were deconstructed with the explanatory framework of 'political ecology' in a multi-faceted and multi-scalar way. After this preliminary analysis, in presenting 'evidence', four HPP cases from Turkey's Western Mediterranean Province were used to explore socio-environmental transformations caused by HPPs. Accordingly public reactions against the HPPs, three of which were massive protests, while the others resulted in consent of the locals are examined in this exploration.

Keeping the analysis within the context of environmental justice and drawing on qualitative methods, including three months of field research, factors leading to such public reactions were identified within the patterns suggested in 'justice'. In turn, this research comes to the conclusion that Turkey's HPP process cannot be considered as just. In addition to this deductive analysis, this research has significantly contributed to the existing environmental justice literature since it has discussed and formulated a unique framework of making environmental justice claims that can be applicable in non-Western context.

## CHAPTER 1: INTRODUCTION

Saklıkent Valley is located in the Western Mediterranean Province, parts of which have been recognised as a national park for its renowned natural beauty. Strolling through Saklıkent Valley, scenic views intertwine with ancient ruins, easily grabbing attention. Amid this tremendous natural beauty are the main water sources supporting the basin: the Eşen Stream and its tributaries. Following the stream away from the national park and approaching to the Valley's borders by following the stream, small settlements begin to appear, completing the scene. When visiting these settlements, it becomes apparent that the stream and natural beauty are seen as the main livelihoods of the local communities. This is not just apparent from conversations held in the basin; the greenhouses, fruit gardens, fish-farms, agricultural plots, small touristic businesses, tourists wandering around and trout restaurants speak for themselves.

In a different scenery around one of the tributaries of Eşen Stream but in the opposite direction of Saklıkent Valley, the remote village of Söğütlüdere greets visitors with all its ordinariness. This village and this small area of the Eşen Basin portray what is not seen in Saklıkent Basin: steep and incomplete roads, scattered settlements, limited agricultural plots, and a lack of amenities and businesses. Most importantly, however, are the grumpy locals complaining about their lack of socio-economic and environmental opportunities as compared to surrounding settlements, including those in the Saklıkent Basin. A few minutes of observation and communication with locals also clearly confirms that the water is still the only asset of the village in maintaining people's lives.

Visiting another stream in the Western Mediterranean Province, Kargı Stream, and the main settlements of the basin, the villages of Kargı and Yanıklar, the eye-catching natural beauty and scenic views once again stand out. Trees of *Liquidambar orientalis* that are endemic to the region line the stream, while pine and plane forests with colourful pomegranate and citrus yards add detail to the landscape. This scenic picture is completed by irrigation canals that are full of water, and a series of touristic businesses ranging from eco-tourism hubs to five-star hotels. Agricultural plots, olive yards and fish farms lie next to the stream. As a complementary point to these observations, conversations with random locals provide insight on the fact that Kargı Stream is their sole source of livelihood.

Wandering around Yuvarlakçay Stream and its source, which are classified as a Special Environment Protection Area in the Western Mediterranean Province, different shades of green primarily represented by pine and plane forests welcome the visitors. This scene is completed by the scattered settlement of a forest village, Pınarköy, with its locals' small agricultural plots, greenhouses and trout restaurants. One cannot help but be unsettled by the unexpected interruption of this breath-taking scene when suddenly met with a deforested pitch close to the water source. Investigating this striking contrast in the scenery, a few minutes of conversation with locals shows Yuvarlakçay Stream's vital role in their socio-environmental lives.

Apart from being in the same region, Western Mediterranean Province of Turkey, the main commonality between these areas is that water (and these streams) is the key source of socio-economic activities and environmental integrity. A further commonality is that Turkish state and private sectors have recently attempted to build small-scale run-of-river hydroelectricity power plants (HPP hereafter) on each of them. These HPPs, despite not requiring the construction of big reservoirs and depicted as being environment-friendly, are still associated with numerous socio-environmental impacts. The fact that construction companies are granted the water use rights for up to 49 years generally causes unrest among the local communities. This is due to either denial of locals' access to water or its limitation. This jeopardises their main socio-economic activities and living spaces, which are reliant on water availability (see Islar, 2012a). This unrest is not only due to the tangible impacts of the HPPs; additionally, unrest sometimes emerges in the attempt of HPP construction, due to the concerns of local communities about the potential changes in their access to water, livelihoods and living spaces. HPP constructions also lead to visible environmental degradation in different parts of Turkey (see Hamsici, 2010). For example, in the abovementioned Kargı-Yanıklar and Yuvarlakçay Basins a large number of trees were cut down in the attempt of HPP construction. Such socio-environmental controversies have led local communities in different parts of Turkey (including Saklıkent, Kargı-Yanıklar and Yuvarlakçay) to form opposition movements at different scales to protect their livelihoods, living spaces, water use rights, social lives, environment, and above all, to protect their water, which they heavily depend on.

Turkey's HPP process is not always associated with the opposition from locals. There are also cases in which local communities have supported the construction of HPPs by either

consenting or staying indifferent to such local developments. For example, in the abovementioned Söğütlüdere village, the locals welcomed HPP construction. It is understood that locals of Söğütlüdere believe in rehabilitation of their existing worse-off conditions as a result of HPP constructions. As seen in this case, companies' promises to pay annual money to villages or improve infrastructure in problematic places become influential in receiving locals' consents for the HPP constructions. These cases and similar ones seen in national media, academic works including Islar (2012a, 2012b), Eryılmaz (2012) and Erensu (2013) as well as journalistic research (see Hamsici, 2010) all have an unexplored focal point of such public reactions: whether locals consent for HPPs or they oppose to them, the local HPP processes are based on the search of ***justice***.

This research primarily explores justice elements embedded in Turkey's HPP policies, depending on the four HPP processes introduced above. This introductory chapter sets out the agenda of this research. Accordingly, the following sections respectively provide the **background information and context**, **research questions**, **aims and objectives** and **justification**. The chapter concludes with the introduction of the **structure of this research**.

### 1.1 Background Information and Context

It is known that water policies can be used to strengthen environmental entitlements, which are 'alternative sets of utilities derived from environmental goods [e.g., water and food] and services [e.g., pollution sinks] over which social actors have legitimate effective command and which are instrumental in achieving wellbeing' (Leach, Mearns and Scoones, 1999: 233). However, they can also be effective tools in governments' hands to deprive individuals of these entitlements, by hurting their means of subsistence and causing environmental degradation (Rogge, 2001). For example, as seen in the cases of dam constructions, whose general aim is to provide a secure and clean supply of energy, large populations can be displaced and natural habitats can be destroyed, leading to a myriad of social, cultural and economic problems (Parasuraman, 1996).

Hydro-constructions, the key parts of water policies in determining entitlements, have been globally and traditionally prioritised as development strategies as well as promoted based on their numerous benefits. International Energy Agency (IEA, 2012:5) believes that those constructions 'can improve access to modern energy services and alleviate poverty, and foster

social and economic development, especially for local communities' in developing nations, while their redevelopment 'can deliver additional benefits' in developed ones. Gleick (2003) highlights that majority of food production is globally achieved through artificial irrigation provided by hydro-constructions, while their contributions in the provision of drinking water, health and hygiene (through sewer systems) are also noted. IEA (2012) maintains that hydro-constructions can also provide a range of functions including flood control and freshwater supply. Additionally, their contributions to the global energy production cannot be denied. Amid debates of global climate change and emission reduction as well as the promotion of renewable energy generation for sustainability, the role of hydropower development has been reiterated at the global scale as 'the largest source of renewable energy in the electricity sector' (Kumar et al, 2011:441). When it is translated into numbers, 16.3% of global electricity (3288 TWh) was generated through hydropower plants by the end of 2008 (IEA, 2010:1). All of these proposed benefits associated with hydro-constructions have resulted in culmination of around 59,000 large-scale dams (higher than 15 metres) globally according to International Commission on Large Dams (2015).

Zarfl et al (2015) argue that due to global population growth, increasing energy needs, food and drinking water requirements and an overemphasis on carbon reduction and sustainable development, the building of hydro-constructions have been globally revitalised. They specify that by 'March 2014, a total of 3,700 hydropower dams with a capacity of more than 1 MW each were either planned (83%) or under construction (17%)' primarily in the developing world (Zarfl et al, 2015: 165). In their analysis, developing countries such as China, Turkey, India and Brazil are shown among the top countries where these constructions and plans are concentrated.

According to this information, hydro-constructions constitute an important part of the economic development, particularly of energy policies in Turkey. It would be beneficial to visit statistical information at this point to understand the work below. The Turkish economy is the 17$^{th}$ largest economy in the world, with almost six percent annual GDP average growth rate between the years 2002 and 2011 (Ministry of Foreign Affairs, 2014). According to official data published by TurkStat (2013), Turkey's population is 76 million with a 1.12 percent annual population growth rate. The population is expected to increase to 85 million

by 2025 with a decreasing population growth rate. The urbanisation growth rate, projected for the 2010-2015 period, is 2.4 percent (TurkStat, 2013). Based on this data, concerned officials from state institutions have pointed out the increasing energy demand this growth creates and have underlined the rising energy consumption in the country as an urgent issue that needs to be addressed. The Energy Market Regulatory Authority (EPDK, 2012) emphasises that energy consumption in Turkey is increasing due to rapid economic and population growth rates, as well as increasing urbanisation rates.

Energy provision has become one of the most important issues in Turkish domestic politics (EPDK, 2012). In 2011, 229.3 billion kWh of electricity was consumed in Turkey, which is expected to reach to 398-434 billion kWh by 2020 (EPDK, 2012). Turkey's annual total primary energy consumption has gone up by around four percent since 2000 (Şirin and Ege, 2012). The EPDK Report (2012: 10) notes that Turkey meets only one-third of its primary energy supply through its domestic resources, which indicates the country's energy dependency. The same report concludes that there is an urgent need for Turkey to attract foreign and domestic investments to its electricity market (EPDK, 2012). To this purpose, Turkey has extensively reformed its electricity market since 2001 by enacting several pieces of legislation and amending existing ones to introduce significant incentives to the private sector. Neoliberal mechanisms such as Build-Operate-Transfer (BOT), Build-Own-Operate (BOO), and Transfer-of-Operation-Rights (TOOR) have also been promoted in the electricity market. All of these have facilitated the further engagement of private actors to the energy market (Başkan, 2011).

These policies, aiming to increase domestic electricity generation to meet increasing electricity demand and consumption, are widely utilised in the hydroelectricity sector in Turkey (Eberlein and Heeb, 2011). With its topographic and climatic advantages, Turkey traditionally prioritises its hydropower potential in energy generation, since it does not have enough primary sources such as oil and gas to generate energy (Akpınar, Kömürcü and Kankal, 2011). Turkey utilises around 20 percent of its hydropower potential (216 TWh/yr) (TMMOB, 2011), while hydroelectricity generation makes up 22.8 percent of total electricity generation in the country (EPDK, 2012). The Minister for Forestry and Water Affairs, Veysel Eroğlu (2011), declared that Turkey's hydropower potential will be almost fully utilised (90 percent) by 2023, mainly through small-scale HPPs. To achieve this utilisation level, rivers

and even streams that are not appropriate for the construction of large-scale hydro-projects have been offered to the private sector for construction of numerous HPPs.

Since the enactment of electricity market reforms in 2001 and further legal frameworks and amendments including the By-law on Principles and Practices on Signing the Water Use Right Agreements for Electricity Production in the Electricity Market (2003) and the 2005 Law on Utilisation of Renewable Energy Resources for the Purpose of Electrical Energy Production among others, small-scale HPPs have begun to prevail in Turkey's water policies. These legal frameworks have enabled private companies to take control of water sources between 10 and 49 years to produce electricity by transferring water use rights to them. They have also provided a series of incentives and subsidies including purchase guarantees, lucrative delays in paying instalments to the state, and easement of expropriation/appropriation processes in HPP constructions. As a result, since the enactment of the 2001 Law on Electricity Market, 1,528 HPPs have been planned by October 2014. Of these 488 are operational, while 144 are in-construction, and the rest are still in the planning stages (DSİ, 2014, personal communication). Yet, experts and official sources assert that even when all these HPPs are completed and operating with full capacity, they are expected to contribute only eight percent of the electricity production in Turkey in the most optimistic accounts (DSİ, 2014, personal communication).

This process of spread of HPPs reflecting neoliberal notions (see Harris and Islar, 2013) cannot be detached from Turkey's modernisation process. Modernisation has been prevailing and defining Turkish politics since the beginning of its Westernisation process in the late Ottoman period. It was during this period that Turkey peaked in its transition from traditional Ottoman Empire to modern republican regime (see Bozdoğan and Kasaba, 1997). In this process, Turkey's initial governing elite (referred as Kemalist elite, following the naming of the founder of contemporary Turkey, Kemal Atatürk) have centrally inserted a series of socio-economic reforms to transform traditional society into a modern one and achieve economic development of the country to level with the Western nations. These two overarching goals–social progress and economic development—have dominated the policy-making processes, instances of which are still visible in each policy domain regardless of the ideological differences of Turkish governments (see Adaman and Arsel, 2005). In that sense, Turkey's water management and HPP process still reflect these goals as they are justified and implemented based on those objectives and other modernist notions, namely

technocracy, rationality, and dominance of science and technology, as well as top-down and centralised policy processes (see Adaman, Akbulut and Arsel, forthcoming; see also Peet and Hartwick, 2009). This association between Turkey's water management and modernisation needs to be established to understand the roots of current HPP constructions, since they are mediated based on these modernist notions as hinted above.

This background information implies that HPPs, as a policy scheme, implicitly reflect technocentric (created by rational and science-domineering perspectives), marketised (promoted through market tools and private sector involvement) and state-led (regulated and governed by the state) governance patterns (Scoones, Newell and Leach, 2015). These patterns infer that 'justice is implicitly assumed to be delivered' since technocracy works for the 'public good', the private sector aims at 'efficiency' and 'the state has authority and legitimacy to protect rights, oversee redistribution and ensure that the interests of majority are served' (see Scoones, Newell and Leach, 2015: 17). This implicit role of justice becomes clear in Turkey's HPP process when official documents and declarations supporting HPP policies are analysed. For example, DSİ's engineers interviewed for this research described HPPs as 'win-win' situations for the state, private sector, the environment and Turkish citizens. One of these engineers highlighted that 'it is vital to use national sources for electricity production…It had to be fully-utilized long ago' when they indicate that everyone would 'win' at the end of the process. Veysel Eroğlu (2015), Minister of Forestry and Water Affairs, reaffirmed this by specifically pointing to the environmental benefits of the HPPs: 'HPPs do not damage on nature; they prevent flooding and erosion; they produce electricity, clean and renewable energy' hinting at their contributions in attainment of socio-environmental justice. In this process, he also supported the private sector's involvement. When Eroğlu (*Milliyet*, 2005b) indicated that 'private sector would complete the construction of a powerplant in two years while the state does it in 12 years', he underlines the efficiency of the private sector. All of these notions can be elaborated through the following extract of President Erdoğan (*Sabah*, 2014):

> 'These HPPs, as renewable sources, are the cleanest and the most environmentalist way of generating energy. Water released from the HPPs are cleaner and purer and involves more oxygen. While they seriously contribute to the regional development during their constructions, they are also strategically important in meeting our country's energy needs…How will factories and industry work? How will we live? We need this [energy], so we will produce it.'

When he maintains the same talk by declaring that hydroelectricity is cheaper for the citizens, compared to natural gas, the justice implications of HPP process can be unearthed. These policies and such declarations clearly show that HPPs would not be associated with environmental damage; on the contrary, they are expected to increase the environmental quality. Furthermore, such declarations specify that the private sector's involvement would increase efficiency and allow the state to canalise saved money to other areas. In addition, their socio-economic contributions at regional level are frequently underlined, while their overall contribution to energy generation would benefit the entire nation. These declarations strongly imply that HPPs are expected to lead to fairer socio-economic and environmental distributions.

Nevertheless, when HPPs are implemented at the local level, this optimistic portrayal fades away. HPPs have been mostly met with frustration by local people, unlike other similar constructions or development projects initiated in the Turkish history. General accounts on those frustrations can be seen in Hamsici (2010), TMMOB (2011), Eryılmaz (2012), Islar (2012a, 2012b), Erensu (2013) and EJOLT (2015). There is also extensive media coverage (see, for example, Gibbons and Moore, *The Guardian*, 2011) and documentaries on these localised struggles (see *Sudaki Suretler* [Faces on the Water] and *Akıntıya Karşı* [Against the Flow]). Accordingly, by examining these sources, it is understood that HPPs have been confronted since they threaten local communities' existing socio-economic, cultural and environmental activities; they limit their access to water; and they operate along a highly-centralised and top-down policy processes. The same works specify that cases that do not involve opposition still emphasise such negativities. This can be seen when locals consent for HPPs when they are offered rehabilitative means by companies to improve their existing poor socio-economic conditions. Above all, these works argue that justice is not delivered to certain groups of society opposed to the implicit assumptions prevailing at the political and administrative level of Turkey's HPP process. That is to say, justice issues explicitly emerge as the backbone of these processes at the local level when locals' reactions, regardless of their opposition to/support for the HPP constructions, are brought into greater focus. This correlation between HPPs and issues of justice has been implied in the recent analyses of this process for Turkey. However, they were either taken for granted, as seen in various cases introduced in EJOLT (2015), or only explored in a limited way, as seen in Islar (2012a, 2012b), or just hinted at, as seen in the rest of works referred in this paragraph. Accordingly,

there is a need to establish this correlation between HPPs and justice to explain this contradiction between HPP process (top-down, technocratic, marketised and state-led), which is believed to promote social justice and environmental sustainability nationwide, and localised reactions revolving around justice claims since HPPs (are thought to) deteriorate locals' existing socio-economic and environmental conditions. This correlation can be useful in addressing ongoing problems embedded in these processes and this will be the main focus of this research.

In light of this background information, this research uses an environmental justice framework to clarify this correlation and reveal the justice elements embedded in Turkey's HPP process. As a contested concept, which does not have a crystal-clear definition, 'environmental justice' can be defined through one of the most frequently cited definitions of the concept by the Commonwealth of Massachusetts (2002: 2) as follows:

> 'Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits.'

This concept emerged in the US in the late 1970s. Although there have been important contributions to environmental justice studies since its emergence, its early phases have remained geographically biased, i.e. highly US-centric. The interest areas were quite limited to distributional inequalities of waste, along with racial, economic and political positions of the people, which have been generally correlated to the notion of 'environmental racism' (Bullard, 2005). However, growing academic research in the field has emphasised new dimensions and new focuses to the concept of environmental justice. That is to say, recent studies such as Schlosberg (2007), Holifield, Porter and Walker (2009) and Cook and Swyngedouw (2012) argue that the concept's scope has been extended beyond the US; it has started to focus on other environmental issues in addition to waste and pollution; and it has proposed comprehensive explanatory frameworks in explaining the processes of the formation of socio-environmental inequalities. Furthermore, its theoretical focus has been taken away from distributive issues towards the other dimensions of justice, like recognition and participation (see Schlosberg, 2004, 2007, 2013). This research is framed within this extended environmental justice concept in its exploration of the justice elements embedded in Turkey's HPP process.

### 1.2 Research Questions

To address this fundamental issue, this research poses to the main question:

- *To what extent do the existing conceptual frameworks of environmental justice reveal and explain socio-environmental (in)equalities in Turkey's recent HPP policies and implementations?*

The answer of this question requires the revelation of socio-environmental impacts of HPPs to claim what is just or unjust. In addition, it also requires an exploration of the roots of those socio-environmental (in)equalities within modern Turkish history, to unearth how those (in)equalities are conceived. Most importantly, it necessitates the consideration of the contextual issues within the environmental justice concept, including whether the existing environmental justice framework is able to address major socio-environmental (in)equalities bound to HPP processes in Turkey. For these reasons, following questions are raised to complement the main question:

- *Can Turkey's modernisation process explain the roots of current socio-environmental (in)equalities occurred in Turkey's HPP process?(Chapter 5)*

- *What are the socio-environmental impacts of HPPs in Turkey? (Chapters 6 to 9)*

- *How can the relevance of the environmental justice concept be increased in non-Western contexts? (Chapter 9 and 10)*

### 1.3 Aims and Objectives

To this end, this research intends to:

- Situate the local HPP processes of Turkey within a framework of environmental justice;
- Give a detailed account of the concept of environmental justice;
- Investigate the role of water management in Turkey's modernisation agenda and explore the impacts of modernisation in Turkey's water management;
- Reveal the socio-economic and environmental impacts of HPPs on local communities and nature, based on four case studies from the Western Mediterranean Province of Turkey;
- Provide a comprehensive analysis of Turkish water politics in a multi-scalar and multi-faceted way;
- Make an environmental justice claim and analyse if the existing environmental justice frameworks are able to cover the main socio-environmental controversies embedded in Turkey's HPP process.
- Frame policy recommendations based on the environmental justice analysis of Turkey's HPPs.

### 1.4 Justification and Motivations

The HPP issue has become increasingly significant in Turkish domestic politics thanks to local oppositions and the socio-environmental negativities bound to them, experienced in the all parts of the country. This issue has also drawn attention due to flawed legal processes, in which the state and companies sometimes fail to implement numerous court decisions outlawing the HPP constructions. These issues are highly publicised in Turkish media (see Hamsici, 2010) and international media (see *The Guardian*, 2011) as well as by international organisations (see CounterCurrent, 2011, Eberlein and Heeb, 2011) and have begun to attract scholars' attentions (see Islar, 2012a, 2012b; Eryılmaz, 2012; Erensu, 2013; EJOLT, 2015). This increasing publicity of the HPP issue and its ongoing implications in Turkish political life make this research timely and highly relevant.

Moreover, this introduction implies that HPPs are centrally planned to meet Turkey's energy need in support of its economic development. It, on the other hand, hints that the implementation of HPPs creates socio-economic, cultural and environmental controversies at the local scale. This relationship between a national HPP process prioritising economic development and local implications of HPPs frequently depriving people of worsening, socio-economic, cultural and environmental conditions, presents a contradictory picture. Even this brief description of the HPP process and its current status in Turkey calls for consideration of the justice dimensions embedded in these processes. That is to say, justice-related issues are too obvious to neglect in the HPP process, and their relationship needs to be further reinforced to understand this contradictory depiction of Turkey's HPP process. Such an analysis may call for the explicit integration of environmental justice elements into the HPP policies if it manages to finalise this correlation between HPP policies and justice.

To this end, the concept of environmental justice theoretically and empirically emerges as a highly relevant framework for this analysis. Since HPPs are parts of Turkey's environmental politics and their local implications are associated with socio-economic, cultural and environmental problems, this concept naturally becomes pertinent to this analysis. Considering the complexity of socio-natural systems, such an investigation requires a multi-disciplinary approach, one capable of revealing numerous socio-environmental inequalities and conducting a comprehensive account of Turkey's HPP process. This also promotes application of the framework of environmental justice for this analysis since it is inherently rooted in disciplines including, but not limited to, sociology, political science, environmental sciences, law and economics. The situation also calls for multi-scalar, i.e. perceiving the policy analyses as an interplay between international, national and local scales, and multifaceted, i.e. considering policy processes as having multiple dimensions, analyses of socio-environmental inequalities. Due to the fact that the environmental justice concept is still evolving, its application to this under-represented Turkish context may expand its conceptual focus through integrating contextual findings uncovered during this analysis. That is to say, addressing this niche research area in a Turkish context may enrich normative environmental justice conceptually, which provides further justification for undertaking said research.

Finally, as Tschakert (2009) rightfully specifies, undertaking an environmental justice analysis requires empathy and commitment to understand socio-environmental dynamics and

inequalities by heart. This is the main reason that Turkey has been selected as the case study of this research, since the author is Turkish and familiar with the socio-cultural and political dynamics of the country.

### 1.5 Structure of the Research

Chapter 1 has so far provided the background information and context of this research. It has introduced the core elements of this research by formulating research questions, establishing the aims and objectives and providing justifications in pursuing this quest. Overall, this chapter has set out the research agenda.

Chapter 2 familiarises the readers with the key concepts of this research. In this literature review, 'environmental justice' is introduced conceptually by elaborating its history, features and explanatory frameworks.

Chapter 3 articulates the conceptual framework of this research: making environmental justice claims. Based on Walker's (2012) analysis, when making a well-equipped environmental justice claim, researchers should focus on ***justice*** (how things ought to be), ***process*** (why the things are how they are) and ***evidence*** (how the things are). Chapter 3 then presents the 'justice' component by elaborating on the ideal of environmental justice. Accordingly, Schlosberg's (2004, 2007, 2013) multi-dimensional environmental justice understanding (justice as distribution, justice as recognition and justice as participation) is elaborated on using the patterns of analysis that are sought later in the evidence chapters.

Chapter 4 substantiates this conceptual framework and introduces operationalization of this research. It explores how the abstract concept of environmental justice can be bridged with HPPs. Most importantly, Chapter 4 also marks the patterns of the conceptual framework of making environmental justice claims and Schlosberg's three dimensions of environmental justice for the case study analyses. By doing so, Chapter 4 provides a detailed introduction of the methodology and methods applied in this research. Specifically this involved desktop study and field visits undertaken for this research, through which the abstract concept of environmental justice and its patterns of analysis are substantiated to examine Turkey's HPPs.

Chapter 5 focusses on the component of 'process' of the making environmental justice claims. This chapter historically evaluates the development of Turkey's water management

(1923, foundation of Republican regime-onwards) within its modernisation process. This enables a consideration of Turkey's water management as a complex process in which the interplay between ideological, discursive, social, economic, technological and ecological processes and relations has led to the formation of today's HPPs and their associated socio-environmental (in)equalities. Thus, this chapter presents Turkey's water management and HPPs within this multifaceted perspective based on Turkey's modernisation.

Chapter 6, 7 and 8 centre on the 'evidence' component of making environmental justice claims. They deepen the analysis of Turkey's HPP process empirically by presenting the results of field studies. Based on the local HPP processes at Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay, these chapters respectively reveal (potential) socio-environmental impacts of the (potential) HPP constructions in terms of distributive, recognitional and participative (procedural) environmental justice. These revelations rely on the primary data collected during the field visits in those locations, and they are obtained through deconstruction of the public reactions against HPPs. At the end of each of these chapters, an environmental justice claim is made for each of the cases.

Chapter 9 discusses field results and attempts to scale this research up towards the national level to reinforce the environmental justice claim regarding Turkey's HPP policies. In other words, the overarching aim of this chapter is to complete the environmental justice claim by interpreting localised implications of HPP within the national scale. This chapter also questions the adequacy of the existing environmental justice framework in light of the key socio-environmental (in)equalities experienced in the Turkey's HPP process. The contextual findings uncovered during this research are then used to suggest ways to modify the existing framework.

Chapter 10 draws general conclusions from this research and reiterates how this research contributes to the academic literature.

# CHAPTER 2: UNDERSTANDING ENVIRONMENTAL JUSTICE, ITS FEATURES AND ITS EXPLANATORY FRAMEWORKS

## 2.1 Introduction

There are many lenses through which environmental and water politics can be examined. In this sense, Turkey's environmental and water politics are not an exception. Elsewhere, thorough analyses regarding Turkey's environmental politics have been conducted based on its modernisation process (see Adaman and Arsel, 2005), political economy (Akbulut, 2011) and political ecology (Turhan, 2014). Comprehensive policy-oriented and international relations-focussed analyses (see Kibaroğlu, Scheumann and Kramer, 2011 and Conker, 2014, respectively), social movements-oriented (see İlhan, 2009) and sociology-focussed studies (Eryılmaz, 2012) have also been undertaken specifically. The present research uses a different perspective when examining Turkey's environmental/water politics: it aims to seek for the notion of 'justice' within the water policies of the country, and it is centred on the concept of environmental justice.

This chapter reviews the main bodies of literature utilised in this research: environmental justice and political ecology. By doing so, this chapter sets the basis of the conceptual framework for the research (see Chapter 3), while intending to familiarise readers with the main concepts frequently used. Accordingly, this chapter evaluates the concept of environmental justice by descriptively examining its definitions, evolution, scope and explanatory frameworks.

## 2.2 Introducing Environmental Justice: Definitions, Scope, Explanatory Frameworks and Its Evolution

The concept of environmental justice is introduced as a 'contested' one, having numerous definitions and affiliations (see Agyeman and Evans, 2004: 156). Its definition varies with the perception of the scholars if they refer to the relevant movements or theories about it. Its contested nature prevents academics from agreeing on a singular definition of the concept, which makes it inherently pluralistic (Schlosberg, 2007). To grasp its general features and focus, it is useful to see examples of definitions of environmental justice. Accordingly, the

literature categorises it under three groups: ‘early’, ‘critical’ and ‘eco-centric’ (see Swyngedouw and Cook, 2012).

Firstly, in its early implications, the definition of the concept was limited to the principles and implementation of environmental laws and policies in the US. For instance, Robert Bullard (1996: 493), as one of the pioneers of the concept, defines it as a concept embracing ‘the principle that all people and communities are entitled to equal protection of environmental and public health laws and regulations’. In conjunction with Bullard’s definition, the Commonwealth of Massachusetts (2002: 2) provides a wider definition whereby:

> ‘Environmental justice [emphasis removed] is based on the principle that all people have right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits.’

The definition of the US Environmental Protection Agency (1998: 7-8) can be an illustrative example of the definition of the concept, where environmental justice is regarded as:

> ‘the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socio-economic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.’

These three interrelated definitions show the early focus of the concept, which will be detailed in the next sections. At this point, it is argued that the concept of environmental justice has been mostly perceived within the application of the principles of environmental laws equally within the society. It has been designed with respect to the consideration of group differences, and targets their participation in environmental decision-making processes. Here, as seen in these definitions, the concept inherently refers to pollution-related problems as its core, while they confine the mandate of the concept to the national and local scales in the US.

Secondly, the concept’s US-centric focus has been challenged, and different perspectives have been added to the concept’s definitions, yet early definitions of the concept have not

been rejected entirely. In other words, the essence of early environmental justice definitions, like the consideration of group differences based on certain factors, especially race and ethnicity, and participation of those groups in environmental decision-making processes has been preserved in the relatively recent environmental justice analyses. For instance, Joan Martinez-Alier (2002:53) defines environmental justice movements 'as ecological distribution conflicts, that is, conflicts over the inequalities of access to natural resources and shouldering of the burdens of pollution'. This can be clarified through his presentation of the concept of 'the environmentalism of the poor', referring to the environmental justice movements of poor people in many nations against socio-environmental inequalities. This is also the title of his seminal book. Martinez-Alier (2002: 13) integrates this understanding to the above-defined versions of the environmental justice as follows:

> 'In the USA, a book on the environmental justice movement could well carry the title or subtitle 'The environmentalism of the poor and the minorities', because this movement fights for *minority* groups and against environmental racism in the USA, but the present book is concerned with the *majority* of humankind, those who occupy relatively little environmental space, who have managed sustainable agroforestal and agricultural systems, who make prudent use of carbon sinks and reservoirs, whose livelihoods are threatened by mines, oil wells, dams, deforestation and tree plantations to feed the increasing throughput of energy and materials of the economy within or outside their own countries.'

There are also more radical approaches to the concept, which limitedly appreciate the early definitions and the focus of environmental justice, but essentially call for broader analyses. For instance, Swyngedouw and Heynen (2003) criticise the early definitions of the concept for failing to grasp the essence of those unequal distributions analysed by the scholars. For them, such socio-environmental inequalities are due to broader economic, cultural and political processes, all of which shape environmental and social policies and (in)equalities. Accordingly, Swyngedouw and Heynen (2003: 910) discuss that:

> 'the environmental justice movements [early definitions and US-based analyses] speaks fundamentally to a liberal, hence, distributional perspective on justice, in which justice is seen as …fairness and associated with allocation dynamics of environmental externalities. Marxist political ecology, in contrast, maintains that uneven socioecological conditions [referring to socio-environmental inequalities and roots of the environmental justice movements] are produced through particular capitalist forms of social organisation of nature's metabolism.'

Such definitions of the concept imply its focus should be broadened, which will be examined in following sections. For example, Martinez-Alier's definition clearly extends the

geographic focus and issues concerning environmental justice beyond the US and pollution-related issues, while also endorsing non-racial aspects of the affected populations. Swyngedouw and Heynen's analysis is equally important since they highlight the need for more structural analyses of the environmental (in)equalities, as they are conceived within broader economic, political and cultural processes.

Thirdly, as widely discussed by the works of Dobson (1998), Low and Gleeson (1998), Dryzek (2000) and Schlosberg (2005, 2007), among the others, the human-centric focus of the concept has been extended towards the understanding of 'justice to nature' or 'ecological justice'. This literature brings nature's and posterity's statuses in justice quests into greater focus. Low and Gleeson's (1998:2) definition can be illustrative for this approach, which is inclined to focus more on ethical definitions of the concept:

> 'Who are 'we'? There are two meanings of 'we': 'we the people' and 'we humans'. 'We the people' are always defined by a place within humanity, both social and geographical. So there is a distributional question: who gets what environment-and why? As to 'we humans', there are qualities we share as a species, and we humans have now to consider our relationship with non-human world. The struggle for justice as it is shaped by the politics of the environment, then has two relational aspects: the justice of the distribution of environments among peoples, and the justice of the relationship between humans and the rest of the natural world. We term these aspects of justice: *environmental* justice and *ecological* justice. They are really two aspects of the same relationship.'

Yet, when compared to the previous definitions of the concept of environmental justice above, this definition mostly corresponds with the early definitions, since its focus is fixed on the distributional questions of justice. The extension of this approach can be found in Dryzek (2000) and Schlosberg (2007), especially in the latter, where the author broadly covers the notion of 'justice to nature' in terms of recognitional and procedural aspects, capabilities approaches, and distributional questions. Schlosberg's analysis is not only limited to this, but also introduces a similar discussion for the issue of environmental justice. More information on these aspects will be provided in Chapter 3 when presenting the framework of this research. They will be expanded on further in Chapters 6, 7 and 8 through the case study analyses.

In summary, as demonstrated briefly in this section, there are multiple definitions of the concept of environmental justice, whereby a single one is difficult to determine. Consequently, the intention of this research is not to give a singular definition of

environmental justice; indeed, scholars also imply that a universal definition of environmental justice is not required (see Debbane and Keil, 2004; Schlosberg, 2007; and Sze and London, 2008). Accordingly, different approaches exemplified above are all used to frame this research and, by the end, this research will have its own definition, aiming to further broaden the concept. However, before attempting to do that, it is useful to further explain the history of the concept briefly and its features to understand it.

### 2.2.1. Environmental Justice Movement in the US: Early History of Development of the Concept of Environmental Justice

The concept of environmental justice emerged in the late 1970s in the US as a social movement, rather than a theory. For this reason, rather than discussing the global account of environmental justice, this section will provide the historical development of the environmental justice movements in the US, as it is the US cases that have led to the emergence and spread of the concept within the academic world. The landmark environmental justice cases, such as the Love Canal incident and the Warren County case, and their implications in the US domestic politics of the 1980s and the 1990s are briefly introduced below to show how the concept of environmental justice has been shaped.

The first environmental justice movement in the US is regarded as the Love Canal incident in Buffalo, New York. It was here that hazardous liquid waste spills were noticed in the basements of the houses, which had important health effects on the children in 1977 (Szasz, 1994 and Harvey, 1996)[1]. This incident triggered the local people to mobilise and initiate their complaints regarding the existence of these spills in their basements (Szasz, 1994 and Harvey, 1996). Subsequent to the media publicity in the US of this incident, another spark of the environmental justice movement was flamed in Houston. Here, African-American residents initiated a court case against the construction of a landfill site, which is considered as the first attempt to use civil rights to 'challenge the siting of a waste facility' in 1979 (Bullard, 2005: 19).

However, environmental justice movements have become more visible with the Warren County case (Cutter, 1995; Bullard, 2005; Bullard and Johnson, 2000; Agyeman and Evans,

[1] Szasz (1994) and Harvey (1996) underlines that the residents in Love Canal incident were not people of colour but instead they were middle-class and white people who were mainly women.

2004; Mohai and Bryant, 1992 and Agyeman, 2002). According to those scholars, local people of Warren County, North Carolina, which is mainly populated by African-Americans, initiated protests against the state's decision to create a landfill zone there for hazardous PCB (polychlorinated biphenyl) waste of the country in 1982. These protests were the first mobilisation of African-American people against an environmental threat, and it is considered as a remarkable event for environmental justice movements. Spill over effects from this movement helped in creation the concept of 'environmental racism', a term now used in the US politics (Bullard and Johnson, 2000 and Bullard, 2005). Different activists such as religious groups, civil rights groups and environmental activists, supported these protests and over 500 people were arrested as a result of Warren County protests (Bullard and Johnson, 2000). Since then, the issue of environmental justice has drawn the attention of academia as well.

As a result of those social movements, two important research studies were conducted to assess the correlation between landfill sites and racial and economic status of the neighbouring communities in the US. These studies empirically supported the claims of environmental racism in the US and are frequently cited in the literature (Cutter, 1995; Agyeman, 2004 and Bullard and Johnson, 2000). The study by US General Accounting Office (1983) showed that three out of four landfill zones in North Carolina were located around an African-American neighbourhood even though they constituted only 20 per cent of total population of this region. The other study, by the United Church of Christ's Commission for Racial Justice, provided the first national study addressing to the same correlation nationwide, emphasising race as the most important variable in deciding the locations of the landfill sites in 1987 in the United States (Bullard, 2005).

In line with these academic and political developments, the First National People of Color Environmental Leadership Summit, which is also regarded as 'the single most important event of the environmental justice movement's history', was convened in 1991 in the US (Bullard, 2005:20). In this Summit, issues such as worker safety, land use, public health and resource allocation were discussed in addition to waste management issues born of earlier environmental justice movements (see Mohai, Pellow and Roberts, 2009). The Summit had a global aspect as well since it hosted participants from abroad such as Mexico, Marshall Islands and Chile (Bullard, 2005). As a result of the Summit, *Principles of Environmental Justice* were created to provide 'a guide for organizing, networking, and relating to

governmental and non-governmental organizations' (Bullard, 2005: 21). After this summit, federal states in the US have introduced bills on environmental justice since 1992, which further prompted the interest on environmental justice in the US domestic politics (Cutter, 1995). This process led Clinton Administration to issue Executive Order 12898 on environmental justice to provide 'safe, healthful, productive, and aesthetically and culturally pleasing environment' to all Americans, reinforcing the Civil Rights Act of 1964, and prohibiting the use of federal funds in discriminatory programs in 1994 (Agyeman, 2002). This was interpreted as 'the arrival of the movement's claims in the environmental policy mainstream' (Agyeman, 2002:36). Meanwhile, the US Environmental Protection Agency (EPA) has become more engaged with the environmental justice concept subsequent to this Executive Order, and it has provided guidelines, funds and consultations on environmental justice (US EPA, 2013), although Bush administration significantly hindered those activities by limiting the funds and administrative support to such programs (Faber, 2008).

These movements in the US have also changed the perception of environmentalism in the US. At this point, it can be also useful to introduce the notion of the Not-In-My-Backyard (NIMBY) phenomena, which refers that residents form opposition to the development of new industries around their neighbourhood, bearing the environmental burdens of them (Szasz, 1994 and see Dear, 1992 for further information on NIMBYism). Environmental justice movements in the US, which had been opposed to toxic waste and pollution issues initially, are considered within the NIMBY syndrome. Since the NIMBY phenomena was dominated by 'affluent' communities who forced the pollution away from their neighbourhoods to somewhere else (generally those populated by poor communities) in general, it was considered to have too narrow a focus in the environmental movement (Szasz, 1994 and Lake, 1996). For instance, one of the reasons to consider the NIMBY phenomena too narrow is that NIMBY supporters were only interested in getting rid of polluting industries around them, and when they succeeded at this, they were no longer interested in where the polluting industries went (Szasz, 1994). Heiman (1990 and 1996) argues that the environmental justice movements, started in the US with the Warren County Case in 1982, are labelled within the NIMBY phenomena, however, these movements have had different motivations than those strictly within the NIMBY phenomena. It can be observed that the rhetoric promoted by the environmental justice concept is broader than other dominant discourses like NIMBYism. Additionally, it is more inclusive than NIMBY since it demands fairness in the allocation of

waste and the decision-making process, rather than simply getting rid of pollution from their backyards (Heiman, 1990 and 1996, Szasz, 1994 and Lake, 1996).

In this brief summary of the development of the environmental justice movements in the US, it is understood that they have become important political issues in the US domestic politics. The emergence of environmental justice has also challenged existing and narrowly-scoped discourses of environmentalism, such as NIMBYism, with its grassroots nature and the increasing consciousness on the environmental issues, more than simply removing pollution. Of course, this concept is not confined only to the US, as it has been gradually globalised due to the factors such as the engagement of international scholars to these concepts, the improved creation of activist networks, and the increasing global environmental consciousness. In the next section, conceptual foundations of the environmental justice concept are explored by dividing the existing literature into two parts: early literature on environmental justice and critical contributions to the concept.

### 2.2.2 Conceptual Foundations of Environmental Justice I: General Features of Early Environmental Justice Literature

The sub-discipline of social science literature has grown out of the development of environmental justice movements in the US (Williams, 1999). Departing from the Warren County case, numerous studies have been undertaken on environmental justice issues, generally on disproportionate allocation of toxic wastes, and pollution in cities or individual states in the US (see Williams, 1999). In this section, general features of those studies are explained under three points: firstly, they are geographically confined to the US and they concentrate on limited environmental issues; secondly, they mostly depend on simple proximity analyses and quantitative methods; and thirdly, they are outcome-oriented.

The academic works undertaken on environmental justice in its early period are geographically confined to the US (Williams, 1999; Walker, 2009; Holifield, Porter and Walker, 2009 and Mohai, Pellow and Roberts, 2009). Due to the fact that the concept emerged in the US as a social movement, early academic works were devoted to explain local case studies, focussing on environmental inequalities in the US (Holifield, Porter and Walker, 2009). Accordingly, these works mainly analysed limited environmental issues, specifically the issues of pollution (land, air and water) and the siting of hazardous waste (toxicity) in

accordance with racial and economic differences in the US (Cutter, 1995; Weinberg, 1998 and Walker and Bulkeley, 2006). In other words, early works on environmental justice could not go beyond the issues of unequal distribution of pollution and toxicity at the expense of racial and minority groups in the US. For example, Stretesky and Hogan (1998) examined locations of Superfund sites[2], and the existence of Hispanic and black populations living closer to these waste sites in Florida. In another example, Kraft and Scheberle (1995) demonstrated the disproportionate exposure of lead contamination in the 1970s on minorities and economically disadvantaged groups, mainly, African-American communities. For instance, Hockman and Morris (1998) evaluated the effect of income and race on the exposure to toxicity in Michigan, where it was found that poor and racially-segregated communities were likely to be exposed to the toxicity. As observed in such examples and also indicated by the general literature reviews (see Mohai, Pellow and Roberts, 2009), majority of the early works on environmental justice had limited their focus to pollution control and toxicity issues in the US at different levels.

Scholars largely depended on quantitative methods when framing their research in the concept's initial period. In general, as inferred from previous examples, scholars performed their research by using statistical tools to show disproportionate allocation of waste sites and pollution at the expense of minorities and low-income communities. For example, Szasz and Meuser (1997: 112) imply that early literature used 'simple proximity' analysis, concentrating on the proximity of the case study area to the pollution source or waste site, and the racial composition of the population residing these areas. Bowen et al (1995) point out that proximity analysis does not necessarily prove the existence of environmental injustices since it cannot determine the intent of the decision-makers. In the same article, they underline that industrial location theory creates methodological controversies, assuming that industries are located to the optimal point in which transportation costs of raw materials are lower and market access for final product is feasible (Bowen et al, 1995: 642). Since early environmental justice scholars often neglected industrial location theory, the racial composition of the location decided was interpreted as racially-biased (Been, 1993, 1994). In addition, Bowen (2002:7) also indicates that early scholars, using 'geographical units such

[2] Superfund is a federal environmental programme of the US, which aims to 'address abandoned hazardous waste sites' and ensure cleaning up these wastes after these issues became more visible through environmental justice movements since the Love Canal incident, mentioned earlier (US EPA, 2013).

as zip codes or counties' and census tracts, generalised outcomes of single case study analyses. Further, they used one variable (generally racial differences) to explain disproportionate allocation, which is now considered as poor-quality research (Bowen, 2002). Bowen appreciates the ones using sophisticated statistical data, multiple variables, and software (such as GIS) in their research, as he considers them to be medium- and high-quality research (2002). It can be said that early environmental justice studies had been methodologically confined to quantitative methods such as proximity analysis, census tracts and further statistical tools.

Early environmental justice literature can be regarded as 'outcome-oriented' (Williams, 1999: 60; Greenberg, 1993 and Weinberg, 1998). Pellow, Weinberg and Schnaiberg (2001: 427) define this outcome-orientation as being too 'focused on proving or contesting the existence of environmentally unequal siting outcomes, without thoroughly understanding how these outcomes were produced'. For instance, Bullard (1993) exemplifies the impact of race on waste siting in Los Angeles and Dallas by giving the ethnic and racial composition of the cities, as well as the impacts of waste sites closer to minority and African-American populations, without any reference to the processes leading to those decisions. Similar points are observed in the examples provided to describe the US-centricity of early environmental justice literature above, which are mainly interested in the racial compositions of the locations and their pollution levels rather than investigating how these outcomes are reached.

Along with such features of the early environmental justice literature, it is also important to show how early environmental justice scholars explained the roots of (in)equalities to complement the analysis of early perceptions of environmental justice concept.

### 2.2.3 Explaining the Roots of Environmental Inequalities in the Early Literature: Environmental Racism and Market Dynamics of Real Estates

Early environmental justice literature attempted to explain how environmental injustices in the US have been conceived in the light of two concepts: **environmental racism** and **market dynamics of real estates.** It attempted this by remaining within the abovementioned features of the literature (see Holifield, Porter and Walker, 2009 for the critique). The former concept was mainly formulated and explained by Robert Bullard in his numerous works (for example, Bullard, 1993, 1996, 1998 and 2005 and Bullard and Johnson, 2000) while the latter one has

been explored particularly by Vicki Been (1993 and 1994) and Pastor, Sadd and Hipp (2001). In this section, these two main explanatory frameworks of early environmental justice studies are investigated in detail, helping to further clarify the focus of the concept.

As mentioned earlier, environmental justice literature mainly concentrated on the notion of **environmental racism** when it first emerged. Early research conducted in this field predominantly tried to explain the disproportionate allocation of waste sites and pollution, relative legislations and enforcement of environmental laws and clean-up process in expense to racially and economically subordinated populations (Been, 1994). Bullard (2005:1-2) contested that environmental justice and environmental racism are issues of civil rights and human rights, which concern 'the denial of human rights, environmental protection, and economic opportunities to the communities where people of color live and work'. The first instance of environmental justice (in the form of environmental racism) in the US civil rights movement was in 1968, when Martin Luther King Jr. supported the struggle of African-American garbage workers for 'equal pay and better working conditions' (Bullard, 2005: 19). However, with the Warren County case, described in Section 2.2.1, these issues were brought to the political agenda, and integrated to the US Civil Right Movements, which have demanded the de-racialisation of the US society and politics, including environmental policies. Since then, scholars and activists have used the term 'environmental racism' to describe unequal exposures of racial groups to pollution and waste sites in US society (Bullard, 2005). Martinez-Alier (2002:169) indicates that environmental racism has linked environmental inequalities to the civil rights movements in the US since 'language of race discrimination…is quite powerful' in the process of civil rights movement in the US. In other words, linking environmental inequalities with the notion of racism has particularly drawn the attention of people and politicians in the US to the environmental justice movement and led them to address it at the political level (see Section 2.2.1).

At this point, it is necessary to give the definition of environmental racism. Bullard (2005: 32) defines environmental racism as

> 'any policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities because of their race or color. Environmental racism in public policies and industry practices results in benefits being provided to whites and costs being shifted to people of color.'

Bullard (1998: 471) scrutinises this concept mainly through the notion of 'institutional racism', which is embedded in the US policies. According to Bullard (1998:471), it prioritises the interests of white people by creating a colonial model of the relationship of dependency, causing 'racial inequality, political exploitation, and social isolation of African Americans'. Accordingly, social relationships between governmental, legal and commercial groups, founded on this embedded notion of institutional racism and influential in environmental policy-making have produced environmentally racist policies in the US (Bullard, 1993 and 1998). Therefore, Bullard (1998:474) simply asserts that white people are privileged to have access to better environmental conditions in the US, while African-Americans are 'systematically excluded from these decision-making boards, commissions, and governmental agencies' and burdened with environmental hazards.

Depending on this background information, numerous works seen in the early environmental justice studies particularly aimed at exploring the environmental racism in the US environmental policies. In this paragraph, a few examples are given in order to show the scope of this research. For example, Mohai and Bryant (1992) attempt to show that racial differences should be taken as an independent factor, indicating the allocation of the waste sites and pollution by concentrating on Detroit as a case study, mainly through analysing the demographic data. In addition, Dowie (1995) summarises the general outcomes of academic work seeking environmental racism in the US. For instance, he points out that employment status in favour of people of colour in the mainstream environmental organisations is quite low, in which positions are occupied by white people in general (Dowie, 1995). Furthermore, Leonard (1997: 659) and Lake (1996) determine that Indian tribes in New Mexico voluntarily welcomed the nuclear waste of the nation due to 'the reality of economic depression and lack of opportunity' in exchange of money. This can be interpreted as environmental racism as well, because Indian communities in the US have suffered from nuclear tests and nuclear waste storage pushed by federal government since the 1940s, indicating institutional racism as described above (see also Dowie, 1995). As inferred from these examples, environmental racism has been used as an important tool to explain environmental inequalities in the US.

The second concept, used as an explanatory framework of environmental inequalities in the US, is **market dynamics of real estates** (Been, 1993, 1994 and Pastor, Jr, Sadd and Hipp, 2001). Instead of directly correlating the location of the sites with minority populations, this research branch mainly looks for an answer to the question 'which comes first?' (Been, 1993

and 1994 and Pastor, Jr, Sadd and Hipp, 2001). In other words, they explore whether the locations of the waste sites are decided due to the ethnic-racial composition of the place, or whether market dynamics eventually lead to these areas being mainly populated by African-Americans and minority groups (Been, 1993 and 1994 and Pastor, Jr, Sadd and Hipp, 2001). Been (1994) indicates that locally undesirable land uses (LULUs)[3] may be decided prior to the disproportionate existence of the African-American population around these sites by claiming that these sites may decrease the property values, and make the area less attractive for higher earners, which eventually leads to these areas being populated by poorer people.[4] Been (1993) also states this in a different form. Accordingly, she underlines that locating industrial sites may include many factors such as proximity to transportation means and market, in line with the industrial location theory that was briefly introduced in the previous section (Been, 1993: 1017). She maintains that

> 'the poor and minorities are burdened with the legacy of industrial development not because LULUs were sited in their neighbourhoods, but because of a complex dynamic in which poverty, residential segregation, zoning laws, the availability of low and moderate income housing, and the proximity of jobs and public services led them to move to host neighbourhoods.'

This way of explaining how environmental injustices in the US are conceived underlines that siting decisions may be made at the expense of African-American communities, either due to institutional racism or due to market dynamics, which in time changes the ethnic-racial composition of a neighbourhood (Been 1993 and 1994 and Pastor, Jr, Sadd and Hipp, 2001). In other words, they do not fully confront the role of racism in the decision-making process of LULUs, but they are likely to prioritise that '[t]he distribution of LULUs would look more like a confluence of the forces of housing discrimination, poverty, and free market economics (Been, 1994: 1406)'.

In summary, early environmental justice studies particularly used environmental racism and market dynamics as their explanatory frameworks when analysing the disproportionate allocation of pollution and waste sites among the US society. The usage of the term of

[3] LULUs can be regarded as areas, having industrial sites such as factories, power plants and waste sites, which are not considered as appropriate neighbourhood.

[4] Been (1994) significantly mentions the reality of racism in real estate sector in the US, which she underlines that African-American are not the most preferred neighbours, municipal services are very limited in African-American neighbourhoods, bank credits are not easily given to African-Americans, and environmental laws are not enforced in advantage of them, all of which contribute to the fact that African-Americans may remain in the LULUs while the ones having slightly more income may leave from these sites.

environmental racism has integrated environmental justice movements to the Civil Rights Movement in the US, which has increased its impact at the political level. However, the racism orientation of the environmental justice concept has been challenged, and it has been suggested that racism might not be the only reason to explain the environmental injustices in the US. The dynamics of real estate markets have also been investigated as an explanation for this question. However, these two important notions of early environmental justice studies are not the only tools to explain the phenomena. Starting from the next section, the critical contributions to environmental justice literature are explained, which have provided additional explanatory frameworks to explain environmental injustices, and have enriched the scope and methodologies of environmental justice studies.

### 2.2.4 Conceptual Foundations of Environmental Justice II: Evolution of the Environmental Justice Concept, General Features of Critical Contributions to Environmental Justice Studies

In this section, general features of critical contributions are identified by following the same structure used to list general features of early environmental justice studies. Depending on the existing literature, the general features of critical contributions to environmental justice literature can be generalised under six points: its geographic extension, its inclusion of more subjects in addition to pollution and waste sites, its methodological expansion, its priority to focus on processes rather than outcomes, its increasing inter-disciplinarity and its theoretical enhancement, going beyond the analyses of distributional inequalities (see Sze, 2007; Sze and London, 2008; Holifield, Porter and Walker, 2009; Cook and Swyngedouw, 2012 and Anguelovski, 2014). By explaining these six points, this section aims to demonstrate how environmental justice studies have been evolving, and how scholars have broadened the concept of environmental justice.

Firstly, as explained in previous sections, the geographical focus of environmental justice studies were mainly confined to the US when it first emerged and developed. Accordingly, the problem areas, definitions, application and conceptualisation of environmental justice remained highly US-centric in early studies. However, with the expansion of the field, this US-centricity has been challenged, and the concept of environmental justice has been applied beyond the US, mainly to developing countries (Walker, 2009). For example, Bond (2000)

and McDonald (2002) explain the application of this concept in South Africa, while many others, such as Carruthers (2008) on Latin America, Tschakert (2009) on Ghana, Shmueli (2008) on Israel, Laurian (2008) on France, Bell (2011) on Cuba and Laurent (2011) on the European Union, provide environmental justice analyses beyond the US. In one of the most recent examples, the Environmental Justice Organisations, Liability and Trade project (EJOLT), numerous academics have mapped recent environmental justice movements in different countries including India, Italy, Spain and Turkey (see EJOLT, 2015). These handful examples show that scholars are not only interested in environmental justice issues in the US, but they also concentrate on these issues in other countries, including developing countries and Global South.

Secondly, early environmental justice studies were particularly interested in the issue of the disproportionate distribution of pollution and hazardous waste. With the extension of the concept, this focus has moved beyond these two specific subject areas, and studies have investigated a wide range of environmental injustices (Sze and London, 2008). For instance, Sze and London (2008:1337) show that the concept of environmental justice covers 'areas such as transportation, health, housing and smart growth/land use, water, energy development, brownfields, and militarization'. Further examples about the expansion of environmental justice on damming, mining, biopiracy and climate change can also be observed in academic studies (see EJOLT, 2015).

Thirdly, early scholars prioritised quantitative methods, especially statistical tools, census tracts and simple proximity analyses, showing the proximity of communities to waste sites and their demographic compositions. Their aim was to influence and convince policy-makers on the existence of environmental racism (Holifield, 2001; Sze, 2007). This methodological domination of quantitative tools is considered by many scholars to simplify the issue of environmental justice. This simplification was recognised in one of the relatively older contributions. Szasz and Meuser (1997: 111-112) observed that environmental justice studies, depending on 'simple proximity' analysis, have been methodologically evolving. They achieved this by including more indicators, such as poverty rate, employment rate and education rate, instead of solely concentrating on income and race as indicators with 'sophisticated statistical tools'. In relatively recent environmental justice studies, scholars have emphasised the role of qualitative methods in environmental justice studies (Cook and Swyngedouw, 2012). For example, Holifield (2001:85) highlighted the need of historical

analysis in environmental justice studies to address 'complex geographic processes that generate patterns of inequality'. Pulido (2000:17), for instance, asserts that the early environmental justice studies were methodologically too empirical, which prevented deeper analysis of racism and the 'nature of racism'. However, contemporary environmental justice studies seem to have overcome these methodological issues addressed here. The following quotation by Holifield, Porter and Walker (2009: 593) aptly demonstrates the methodological depth of contemporary environmental justice studies:

> '[M]any of today's environmental justice researchers are situating their work with respect to far broader cross-disciplinary debates about knowledge, representation and meaning, engaging more substantially with explanatory social theory and utilizing a wider diversity of methodologies in investigating the material and political content of socio-environmental concerns.'

This shows that the discipline of environmental justice's methodological focus has been enriched by its recent contributors, who have addressed this gap in the early studies by introducing qualitative tools and diversifying quantitative tools.

Fourthly, environmental justice studies have become more process-oriented. As briefly discussed in the previous sections, early scholars of environmental justice particularly analysed whether race was a decisive factor for communities facing environmental burdens. In doing so they heavily relied on the analyses of existing situations. In other words, they have simply concentrated on outcomes of siting decisions and toxicity, and have tried to explain whether environmental racism or injustices exists or not in particular time and place. This approach has been challenged by more recent studies (see Bickerstaff, Bulkeley and Painter, 2009). For example, David Harvey (1996:401) implies that environmental justice movements should carefully analyse 'fundamental underlying processes (and their associated power structures, social relations, institutional configurations, discourses, and belief systems) that generate environmental and social injustices'. Weinberg (1998:25) also underlines the importance of analysing 'the organizational processes that shape decisions regarding production practices and regulatory enforcement strategies' to explain how certain groups systematically face toxic wastes more than others. Furthermore, Pulido (2000) indicates that the historical process of suburbanisation and decentralisation provides a more comprehensive account of environmental racism. Moreover, Brulle and Pellow (2006) point out that analysts should focus on the social processes as a result of which environmental inequalities occur. In

the light of these notable examples, it can be postulated that research into environmental justice shifts towards the analysis of the process rather than outcomes. This would reveal the underlying issues leading to the environmental policies, which eventually affect the population in a disproportionate way.

Fifthly, when it first emerged as a social movement, the concept of environmental justice was basically rooted in the disciplines of sociology, environmental law and politics (Sze and London, 2008). However, with the contributions of recent scholars, the field has become more inter-disciplinary and its theoretical foundations have been widened and deepened (Holifield, Porter and Walker, 2009). Sze and London (2008:1335) summarise in their review of environmental justice that the discipline now includes approaches from many different fields such as 'human geography, history, literature, philosophy and environmental ethics, political theory, and radical political economy'. It endorses the increasing inter-disciplinarity within environmental justice.

Finally, early environmental justice studies were distribution-oriented, and considered as theoretically weak, since they basically sought for the relation between demographic findings with the disproportionate allocation of the waste sites. As previously explained, they aimed to explain the unequal distribution of environmental hazards among the different communities. These works benefited from the notions of environmental racism and dynamics of real estate markets in the US. This approach is altered by recent contributions. Studies in environmental justice now benefit from various conceptual and theoretical frameworks such as political ecology, political economy, urban political ecology and sustainable development, which take the focus of environmental justice away from the sole analysis of distributional inequalities (Sze and London, 2008 and Holifield, 2009). For example, Schlosberg (2004, 2007) introduces the additional theoretical dimensions to environmental justice. These are *recognitional justice, procedural justice* and *justice of capabilities* in addition to traditional understanding of *distributive justice* (Schlosberg 2004 and 2007, see details in Chapter 3).

To sum up, studies in environmental justice have been developing dynamically due to contributions of scholars from different disciplines. These developments are compiled under six points as: geographic expansion, interest in more subjects, methodological expansion, process-oriented analyses, increasing inter-disciplinarity and theoretical enrichment, all of which have contributed to the extension of the concept, while also globalising its application.

The next section will discuss how these recent advances of environmental justice explain the roots of the environmental inequalities that have taken the discussion beyond the analysis of environmental racism and real estate markets in the US.

### 2.2.5 Explaining the Roots of Environmental Inequalities, Focussing on Broader Processes: The Example of Political Ecology as An Explanatory Framework

As discussed in Section 2.2.2, the environmental justice concept has been used to explain predominantly through environmental racism and dynamics of the real estate market in the US. However, with the evolution and expansion of the concept, these explanations have been found insufficient in addressing numerous global issues related to environmental justice, as discussed in the previous sections. Thus, scholars from different disciplines have introduced numerous explanatory frameworks to shed light on how environmental inequalities are conceived. These frameworks include: the introduction of a more process-oriented investigation of environmental racism (see Pulido, 1996a, 1996b and 2000); the neoliberalisation of natural resources management and dominance of the private sector in environmental governance (see Goldman, 2006 and Faber, 2008); urbanisation and urban development patterns (see Swyngedouw and Heynen, 2003 and Anguelovski, 2014) and political ecology (see Robbins, 2012). Although it is impossible to analyse the wide scope of all of these frameworks separately in such a limited work, the main commonality of these explanatory frameworks should be indicated. All of these frameworks have enabled scholars to analyse local cases as a part of broader socio-economic and political processes, instead of concentrating only on the local outcomes of disproportionate allocation of environmental benefits and burdens. Among those explanatory frameworks, political ecology will be elaborated in detail, since its broader scope touches on all of these different processes. Furthermore, environmental justice is clearly indicated as one of the main objectives of the discipline (see Blaikie, 2012).

As with many concepts in social sciences, political ecology does not also have a universal definition (Peet and Watts, 1996). In one of the earliest works on this concept, Blaikie and Brookfield (1987: 17) define it as ‘the combination of “the concerns of ecology and a broadly defined political economy” which “encompasses…dialectic between society and land-based resources, and also within classes and groups within society itself” ’. However, with the

evolution of the concept, this definition has been improved. Accordingly, this section starts with a presentation of the different definitions of political ecology. This is then followed by an outline of how it perceives environmental issues and how it is correlated to environmental justice literature.

Since its formation, political ecology has been defined by many scholars in different ways. Keil (2003: 727) compiles its main scope and concerns, finding that political ecology has brought 'increased applications and theoretical redefinition' mainly on the issues of 'environmental justice movement, political economy, and the social construction of the nature'. The following definitions of political ecology address these points clearly. Bryant (1992: 27), for instance, underlines that political ecology 'critically' focusses on 'the relationship between environmental change, socio-economic impact and political process', and aims to understand these relationships to address social and environmental inequalities. Greenberg and Park (1994: 1), moreover, describe political ecology as 'a historical outgrowth of the central questions asked by the social sciences about the relations between human society, viewed in its bio-cultural-political complexity and a significantly humanized nature', which theoretically depends on 'political economy, with its insistence on the need to link the distribution of power with productive activity and ecological analysis, with its broader vision of bio-environmental relationships'. Furthermore, Robbins (2012) identifies political ecology as an attempt to politicise environmental issues that have been subordinated by discourses such as scarcity, valuation, population growth and modernisation. From the political ecology literature reviewed for this section, it can be inferred that political ecology is inter-disciplinary, benefiting from the different backgrounds of social sciences such as political science, geography, economics, anthropology, sociology and history. The discipline aims to analyse environmental issues within broader socio-economic and political processes. Most importantly, it predominantly focusses on socio-environmental issues experienced in the developing world (see Peet and Watts, 1996; Schroeder et al, 2008; Robbins, 2012).

As understood from Robbins' (2012) identification, the main criticism of political ecologists can be generalised as the dominance of apolitical approaches in environmental governance. That is, early environmental studies and dominant environmental management practices have originated explanations of socio-ecological problems via the dominant assumption that nature and society are two separate domains, and environmental policies implemented across scales are generally moulded by this dualistic understanding. There have been numerous

attempts to challenge the dominance of such management practices and environmental policies to provide a detailed explanation of the deeper causes of socio-environmental problems within environmental studies. Thereby, especially under the banner of political ecology, specific attention has been directed to the theoretical formation of the concept of 'socio-nature' or 'production of socio-nature', arguing the inseparableness of nature and society. These critiques regarding the nature/society dualism need to be briefly explained to proceed through concepts like hybridity and socio-nature. The co-existence of nature and society will be frequently referred to this study.

The dualistic approach of treating nature and society as separate domains leads to the dominance of two powerful understandings when explaining socio-environmental phenomena, both of which have also dominated discourses and policy practices. They are the notion of scarcity and population growth, which together are considered to be the main causes of the socio-environmental problems for long time, both of which overlook the deep socio-economic causes of the environmental issues (see, for example, Castree, 2001; Blaikie, 2001; and; Robbins, 2012). These two understandings have generally existed cohesively, and they have engendered a powerful meta-discourse in environmental studies and policy practices. It is shown that 'as human populations grow out of proportion to the capacity of the environmental system to support them, there is a crisis both for humans, whose numbers fall through starvation and disease-based mortality, and for nature, whose overused assets are driven past the point of self-renewal', suggesting scarcity and overpopulation are the causes of environmental crises (Robbins, 2012: 14; see Scoones, 1999 and Blaikie, 2001 for further information). In the end, these understandings and discourses of scarcity and overpopulation as causes of socio-environmental problems are assigned as being 'well-established one[s] with a long history' in environmental studies (Robbins, 2012:14). These studies have been originated from the assumption that nature and society are two distinct realms, while also strengthening this dualism (Goldman and Schurman, 2000 and Robbins, 2012).

Due to the inadequacy of this approach in revealing the deeper causes of socio-environmental problems in environmental studies and policy process, which have been prompted by nature/society dichotomy, political ecologists stress that 'the social and the natural are seen to intertwine in the ways that make their separation…impossible' (Castree, 2001: 3). Political ecology, at its essence, aims to investigate social aspects of environmental issues 'in origin

and definition' (Watts, 2000: 259). It highlights that problems regarding environmental management, technological inadequacies or overpopulation are not the main causes of environmental problems (Watts, 2000). In other words, political ecology has begun to accentuate the co-existence of social and environmental with the recognition of the complexity of socio-environmental systems. This realisation cannot be fully grasped through the traditional dominant discourses and practices fed by nature/society dualism (Peet and Watts, 1996; Watts, 2000; Castree, 2001).

Mostly by political ecologists and, particularly, Marxist political economists, the nature and society dualism and such prevailing discourses cause to cogitate the nature simply as raw material or resource (see Prudham, 2009; Bakker, 2010). This body of literature argues that neoliberal and market-oriented tools like commodification, privatisation and marketisation of natural resources are introduced as the solution of socio-ecological problems at management level (Prudham, 2009; Bakker, 2010). In other words, it is claimed that this dualistic understanding isolates nature from society by conceptualising it as raw material or resources. This designates environmental problems as management issues; prioritising the effective management of natural resources at all levels; and creating new markets that, eventually, further commodify, materialise and neoliberalise nature (Bakker and Bridge, 2006; see also Heynen et al, 2007). In line with such explanations, mostly political ecologists and Marxist political economists challenge to the idea of nature/society dualism, since it identifies scarcity and population growth as the main causes of the environmental problems, justifying the introduction of new management schemes (generally technocratic) and neoliberal policies to tackle environmental issues. This, in turn, causes 'the exploitation of both' the nature and society at every level, while it also hinders the investigation of the deeper causes of socio-environmental problems (Alkon, 2013: 663; Bakker, 2010; Prudham, 2009; see also Peet and Watts, 1996 for further details).

Political ecologists, thus, highlight two things along with social constructivism that emphasises the social characteristics of nature:

> 'First, that appeals to nature are often ideological and serve to occlude the historically specific social processes and relations driving nature's appropriation. Second, and more emphatically, that at one level, nature is conceptually and materially *constructed* under the aegis of capital (Castree, 2000: 12-13, emphasis given in the original text).'

This thought is developed further in Neil Smith's (1984) [2008] influential work, *Uneven Development: Nature, Capital, and the Production of Space*, which is among one of the first academic works that theoretically explores the society-nature relations within the capitalist economic system. Scholars have attempted to eradicate the gap between society and nature (Boyle, 2002; Bunce and Desfor, 2007). These works are based on the role of labour in natural transformation, capital accumulation and capitalist behaviours that lead to socio-environmental transitions. They also analyse the socio-economic and environmental processes shaping both nature and society reciprocally (see Smith, 1984). In one example, Loftus (2007) briefly summarises Smith's (1984) [2008] work in that nature is not apolitical, instead, everything we observe in nature is influenced by humans, and influences humans. Loftus (2007: 43) continues his review with transitions such as the one from feudalism to capitalism, or the transition of capitalism between scales. He defines the nature/society relations within the historical process; therefore, human labour shapes the 'first nature' (referring to physical environment) at the global level, and the second nature (referring to social environment) is constituted by human relations defined by capitalism, both of which provide a historical account for global 'uneven development'. Such reciprocal interactions between nature and society are used widely to express that '[n]ature…is inextricably social' (Braun, 2006: 644). Through these works, nature's social side has been emphasised in explaining socio-ecological transitions rather than keeping nature and society separate. The relationship between the social and the natural has been considered as being more than just reciprocal, referring to its complexity this relation, which takes socio-natural relations as 'a network of interwoven processes that are simultaneously human, natural, material, cultural, mechanical, and organic' (Swyngedouw, 1999: 445).

Consideration of the relationship between nature and society as an interwoven web of socio-natural relations is crucial, while explaining socio-ecological transformations is also important, since this enables the careful examination of the complexity behind the socio-ecological phenomena. Such thinking refers to the hybridity of nature and society in which scholars use different analogies (or metaphors) such as 'hybrid', 'cyborg' or 'quasi-objects' and 'metabolism' in these explanations (Bakker, 2010: 717). In other words, these analogies promote thinking of nature and society as being hybrid. Predominantly, this is based on Latour's and Haraway's works on hybrids and cyborgs, which elaborate on the co-existence of the social and natural in the contemporary world (see Latour, 1993, 2003). Urban political

ecologists, in particular, have enriched these analogies in their works. For instance, Swyngedouw (1999:445) describes 'cyborgs' (and 'quasi-objects') as 'hybrid, part social/part natural—yet deeply historical and thus produced—objects/subjects are intermediaries that embody and express nature and society', which is also widely used to explain socio-technological phenomena such as urbanisation, cell cloning and genetically modified organisms (see Gandy, 2005). Relatedly, the metaphor of metabolism[5] represents one of the analogies most frequently applied by urban political ecologists to reveal socio-natural transformations. Grove (2009: 208), for instance, defines 'metabolisms' as 'processes of environmental transformation brought about through the labor process, in which human capacities and non-human potentialities are combined in the production of new environmental forms' which, he also claims, 'are historically defined through social relations of production'. These metaphors can be summed up as follows:

> ''Things' are hybrids or quasi-objects (subjects *and* objects, material *and* discursive, natural *and* social) from the very beginning. By this, I mean that the 'world' is a process of perpetual metabolism in which social and natural processes combine in a historical-geographical production process of socionature whose outcome (historical nature) embodies chemical, physical, social, economic, political, and cultural processes in highly contradictory but inseparable manners. Every body and thing is a mediator, part social, part natural (but without discrete boundaries), which internalizes the multiple contradictory relations that redefine and rework every body and thing (Swyngedouw, 1999: 447, emphasis given in the original text).'

Through the usage of these metaphors, the hybrid thinking of nature and society has been promoted, accentuating the co-existence of nature and society and the interwoven web of socio-natural relations embedded in this co-existence. These socio-natures or hybrids are 'both product and agent of socio-natural change', occurring as a result of simultaneous material, ideological, discursive, social, cultural and natural relations and practices across scales (Linton and Budds, 2014: 174). This understanding urges the consideration of environmental (in)equalities as issues occurring through the interplay between multiple processes in multiple scales. It highlights the inherently political nature of environmental issues, as opposed to the studies and policies developed through apolitical assumptions, which consider nature and society as separate domains.

[5] 'Metabolism' is a term used in chemistry, but it was applied by Marx to explain the society-nature relation, more specifically, the relation between human labour and its impact on nature and vice versa (Linton, 2010).

Political ecology, therefore, focusses on the socio-ecological processes, and how, why and by whom they are produced, rather than concentrating merely on the outcomes of the phenomena (Otero et al, 2011). As Swyngedouw (1999, 2007 and 2013) argues, these socio-ecological processes are the assemblages of, but not limited to, ideological, discursive, socio-political, economic and bio-physical processes. That is, socio-environmental inequalities, produced simultaneously, are the products of the interplay between multiple processes. Analyses of these interactions occurring across scales would explain the roots of social and environmental transformations. Such an analysis is likely to endorse the influence of broader ideologies (and policies shaped by them), such as neoliberalism, urbanisation and modernisation. Along with this understanding, localised environmental crises related to activities such as dam constructions, mining and waste management, which constitute the majority of the literature on environmental justice due to their socio-environmental reflections on the local communities, are no longer viewed as local, since these activities are created along with simultaneous processes occurring at multiple scales (see Martinez-Alier, 2002 and Robbins, 2012).

Based on this background information, power and power relations are regarded as one of the key components of political ecology, the investigation of which would shed light on the roots of the socio-environmental inequalities. Political ecologists argue that the natural transformation of the non-human world is shaped by unequal power relations, which lead to unequal distribution of environment (Swyngedouw and Heynen, 2003; Heynen, Perkins and Roy, 2006; Grove, 2009 and Loftus, 2012). These power relations simply decide the beneficiaries and sufferers of the transformation process of nature (Heynen, Kaika and Swyngedouw, 2006). In other words, '[t]hose in power are able to control who has access to resources…, the quality of these resources and who can decide how resources are utilised' (Cook and Swyngedouw, 2012: 1966). Indeed, these social relations are developed simultaneously with ecological changes dependent on 'class, gender, ethnic, or other power struggles' (Heynen, Kaika and Swyngedouw, 2006: 12).

Political ecologists explicitly correlate their works to explain environmental inequalities, and they aim to fill the theoretical gap in the conceptualisation of environmental justice. As argued previously, Swyngedouw and Heynen (2003) claim that early studies into environmental justice literature have narrow focus in general, since they are over-stressed

the importance of local case studies, trying to correlate environmental justice movements with a liberal distributional understanding.[6] Political ecologists, however, instead of focussing on the disproportionate allocation of environmental inequalities in accordance with race and class, prioritise the analyses of the broader processes leading to these inequalities. Their work is influenced by a range of factors such as the global economy and power relations. Accordingly, Holifield (2009: 641) defines the political ecology approach to environmental justice as 'environmental inequalities as products or at least reflections of social power relations: above all, those of neoliberal forms of capitalist development and class hegemony'. Heynen (2003: 981), furthermore, determines global economy, which he regards as capitalist, as the most important factor, contributing to 'unequal and unjust resource-utilization and hazard-creation'. He proposes to analyse political economic processes through the global economy, creating social and environmental inequalities.[7] Political ecologists also criticise the inclination of early environmental justice studies for localising environmental inequalities. According to them, this overlooks the bigger picture and neglects 'processes and relations generating environmental inequalities at broader regional, national, and global scales' (Holifield, 2009: 641-642). Rather, political ecologists analyse the reflections of complex relations and socio-ecological events occurring at different scales on local environments, which 'create a unique event of environmental injustice at a given location' (Debbane and Keil, 2004: 210). This understanding enables scholars to frame environmental injustices within a multi-scalar approach.

In conclusion, political ecology is one of the most important disciplines contributing to studies in environmental justice. Piers Blaikie (2012), as one of the pioneers of the discipline, clearly indicates that the explanation of environmental justice or injustice is one of the central themes of the discipline. This approach further extends the explanations of the roots of environmental injustices which are sought within broader and process-oriented analyses, while recognising the complexity of environmental politics and nature-society relations as explained above. Political ecologists encourage analysts to see the bigger picture, rather than confining themselves to the dynamics of local cases. This approach can show how these inequalities are produced, and how the root causes revealed in such research can be tackled.

[6] It is referred as Rawlsian justice, taking justice as fair distribution in general. This notion is explored in next section in detail.

[7] See Swyngedouw and Kaika (2000) as well.

Through this approach, political ecologists view the process of social and natural production by focussing on the issues relevant to, for instance, social power relations and the global political economy. The interplay of these issues shape social and environmental inequalities. In the end, political ecology explicitly aims to promote the understanding of environmental justice in environmental governance. Final remarks on this part can be given by introducing the following quote from Swyngedouw and Heynen (2003: 12), which provides a guideline of political ecology to enhance environmental justice:

> 'Socio-ecological "sustainability" can only be achieved by means of a democratically controlled and organized process of socio-environmental (re)construction. The political programme, then, of political ecology is to enhance the democratic content of socio-environmental construction by means of identifying the strategies through which a more equitable distribution of social power and a more inclusive mode of production of nature can be achieved.'

## 2.3 Summary

This chapter visited the main bodies of literature used in this research. As introduced above, the literature on environmental justice is key. Accordingly, this chapter reviewed the concept of environmental justice through evaluating its definitions, history, scope and explanatory frameworks. By doing so, literature on environmental justice was divided into two as its early foundations and critical contributions. The early foundations remain too US-centric and cover limited issues, and their focus is predominantly demoted to the issue of environmental racism as the explanatory framework of the roots of socio-environmental inequalities. This is irrelevant in analysing Turkish cases, and so critical contributions are prioritised in this research. Critical contributors, by mostly taking a process-oriented stance in their analyses, introduce a series of alternative explanatory frameworks to reveal the roots of socio-environmental inequalities. Among them, political ecology emerges as one of the main bodies of literature, which names environmental justice as the focal point of the discipline. Accordingly, by considering nature and society as intertwined to each other, implementing a multi-scalar approach in analysis of environmental (in)justices and focussing on the changes in broader socio-economic and political realms and power relations, this body of research has conceptualised the concept of environmental justice in a wider way. This research, when conducting analysis on environmental justice, will follow these steps in the following chapters.

In line with this information, the next chapter sets the conceptual framework of this research, while remaining devoted to the theoretical foundations of the concept of environmental justice.

# CHAPTER 3: CONCEPTUAL FRAMEWORK OF MAKING ENVIRONMENTAL JUSTICE CLAIMS AND ENVIRONMENTAL JUSTICE AS A MULTI-DIMENSIONAL CONCEPT

## 3.1. Introduction

The last chapter familiarised readers with the main concepts that are applied in this research. That is, the concept of environmental justice, its definitions and its scope were described without engaging in any theoretical debate. Along with those concepts, this chapter articulates the conceptual framework of environmental justice, in which an empirical analysis of environmental justice can be situated.

As already explained above, this research essentially aims to analyse Turkey's recent small-scale HPP policies within the context of environmental justice. Particularly, this research relies on Gordon Walker's (2012) making environmental justice claims framework, which also integrates widely applied multi-dimensional understanding of environmental justice of David Schlosberg (2004, 2007 and 2013). Accordingly, this chapter elaborates this broad framework of Walker (and Schlosberg), which is believed to lead to a systematic analysis informing empirical cases with theories. The first part of the chapter focusses on Walker's (2012) making environmental justice claims, where he claims that an environmental justice claim should ideally include three components: ***process***, ***evidence*** and ***justice***. The second part focusses on the justice dimension of Walker's (2012) framework, and situates it through Schlosberg's multi-dimensional understanding of environmental justice, which formulates environmental justice as ***justice as distribution***, ***justice as recognition*** and ***justice as participation (procedural justice)***. Accordingly, through the elaboration of the broad theoretical roots and patterns of these three dimensions of environmental justice used in numerous analyses of environmental justice, the justice pillar of Walker's framework will be clarified. This will be the main framework for the analyses of the HPP cases in Chapters 6, 7 and 8. Finally, this chapter concludes with the identification of the research gaps, along with the literature review conducted in the previous chapter.

### 3.2. Making Environmental Justice Claims

As indicated previously, this research is structured through the Gordon Walker's (2012) framework of environmental justice claim-making, since it links the theory of environmental justice to empirical analysis. Making environmental justice claims is the overarching objective of this research. According to Walker (2012), to have a well-equipped environmental justice claim, the analysis should consist of three interrelated components: ***Process, Evidence*** and ***Justice***. He maintains that there is no hierarchy between these components, yet such an analysis would suggest both theoretically-driven and policy-oriented analysis of environmental justice. In other words, taking such a framework would lead to the consideration of the concept of environmental justice in (theoretically and empirically) a broader way.

According to Walker (2012), the component of ***process*** explains how the current stages of environmental (in)equalities are conceived for particular cases. The inclusion of this, as a separate component of environmental justice analysis, encourages a process-oriented analysis, rather than an outcome-oriented one as discussed above. The main issue of this component is '*why things are how they are*' (Walker, 2012:40). In this research, this question focusses on the broader processes of production of socio-environmental (in)equalities in Turkey's water management. This reveals the roots of the current socio-environmental (in)justices experienced in the Turkey's recent HPP development cases along with the disentanglement of broader socio-economic, political, discursive, ideological and technological processes at the multiple scales, as performed by Swyngedouw (1999, 2007 and 2013) in his analysis of Spanish water politics. Chapter 5 comprehensively deconstructs Turkey's HPP process with a historical approach, within Turkey's modernisation process, when numerous socio-ecological debates at the different localities (bound to HPP developments) are revealed.

The component of ***evidence*** refers to the particular cases or empirical findings of a study into environmental justice, and revolves around the issue of '*how things are*' (Walker, 2012: 40). In this research, the component of evidence consists of the four HPP processes from the Western Mediterranean Province of Turkey, which are Saklıkent HPP, Söğütlüdere HPP, Kargı-Yanıklar HPP and Yuvarlakçay HPP. In these four examples, socio-environmental

transformations, realised due to the (potential) constructions of the HPPs, have provided the empirical aspects of the research.

The final component of the making of environmental justice claims is defined as ***justice*** by Walker (2012:40), which investigates the issue of '*how things ought to be*'. As indicated in the introductory section, this component essentially integrates one of the seminal works on environmental justice, David Schlosberg's *Defining Environmental Justice*, to the process of making environmental justice claims. Accordingly, Schlosberg (2007), while presenting how the ideal or just situation ought to be, incorporates prevailing social and ecological justice theories and adjusts them to the environmental justice concept. Through this process, he manages to offer one of the most theoretically informed formulations of the concept of environmental justice. In his formulation, environmental justice is regarded as a pluralistic concept (see Chapter 2), and Schlosberg (2007) introduces his four-dimensional definition of environmental justice, where he theoretically explains the concept of environmental justice as *distributive environmental justice*, *recognitional environmental justice*, *participative (procedural) environmental justice* and *environmental justice as capabilities*. He also integrates the arguments of ecological justice with these concepts. At this stage, it is important to underline that although these patterns are predominantly used in analyses of the case studies, to inform empirical side of the research, they will not be taken as granted due to the contextual nature of the stories. It is also essential to keep in mind that Schlosberg (2007) and other justice theorists referred to in the following sections highlight the inter-connected relations between these justice dimensions. That is, although these dimensions are presented separately, they are inter-connected, and shape each other. In this research, the integrative dimension of justice of capabilities is omitted. This is mainly due to a lack of data available to analyse this dimension of environmental justice in Turkey (which depends on human development indexes and data, which is hard to reach at the local scale in Turkey) and the risk of repeating the other three dimensions.[8] Yet, the remaining three dimensions of

[8] J*ustice of capabilities* is added to the environmental justice analysis by David Schlosberg (2007), which is omitted from this environmental justice analysis. However, it may be useful to define it briefly at this point. Capabilities is defined as 'a person's opportunities to do and to be what they choose in the context of a given society; the focus is on individual agency, functioning, and well-being and, rather than more traditional distributive indicators' (Schlosberg, 2007, p.30). Accordingly, justice of capabilities refers to the availability of capabilities such as life, employment, participation and safety in a community (activities and state of existence) (Schlosberg, 2007; Schlosberg and Carruthers, 2010). Schlosberg (2007) asserts that availability of such capabilities in a society can address to the distributional, recognitional and procedural problems of

environmental justice are utilised to frame the case analyses and show how things ought to be, depending on the evidence presented through those cases.

Firstly, *distributive justice* concerns environmental entitlements, which are utilities providing environmental goods, over which social actors have legitimate effective command, whose unequal distribution lead to environmental injustice, rather than scarcity (Cook and Swyngedouw, 2012). In other words, distributive justice refers to 'unequal distribution of [environmental] impacts, the unequal distribution of responsibilities [of environmental decision-making processes] and the spatialities' (Walker, 2009: 615). This dimension of environmental justice is further elaborated theoretically and empirically in Chapter 6.

Secondly, Schlosberg (2004) defines *recognitional justice* by originating his discussion from lack of recognition of disadvantaged and/or vulnerable communities in the environmental decision-making process. Accordingly, he states that 'lack of recognition of group difference' creates vulnerable and disadvantaged groups within a society (Schlosberg, 2004:519). This may damage them culturally and politically, creating a basis for distributive injustices in society. In addition to the misrecognition of a group of people, where they can be devalued against others due to race, religion, gender and wealth, there are also instances in which places, localities and particular natures can also be misrecognised (Walker, 2009). Scholars contributing to this dimension of environmental justice and the third dimension, *participative (procedural) justice*, have frequently used Iris Young's and Nancy Fraser's social justice theories, which together emphasises the role of recognition in social justice, in addition to distribution. This dimension of environmental justice is thoroughly examined through case studies in Chapter 7.

Thirdly, *participative justice (procedural justice)* is perceived as being complementary to recognitional justice, since issues bound to recognitional justice pave the way for issues of procedural justice (Schlosberg, 2004). It refers to people's participation in environmental governance (Schlosberg, 2004). In other words, participative justice seeks for the meaningful participation of the community (and nature) in environmental decision-making processes (see Holifield, 2012; Dryzek, 2000). It also suggests that more democratic and more participatory

environmental justice. This dimension depends on Amartya Sen's and Martha Nussbaum's capability approach, which forms their understanding of social justice.

decision-making processes on environmental issues can tackle recognitional and distributional environmental injustices within society, occurring due to the undemocratic and non-participatory processes. This dimension is covered in Chapter 8, where procedural issues embedded in case study areas are explored and used to investigate the issue of '*how things ought to be*'.

In light of this information, the conceptual framework of this research is a broader understanding of environmental justice, which integrates Walker's (2012) model for making environmental justice claims with Schlosberg's (2007) multidimensional definition of environmental justice. When it is presented altogether, the framework of this research can be pictured as demonstrated in Figure 3.1. Along with this framework, an environmental justice claim will be made at the end of the research. The aim of this claim will be to enrich each component of the claim-making through field findings, and have a particular definition of environmental justice based on Turkish HPP cases. The next section will discuss the justice component of this framework, which answers the broad question of how things ought to be.


**Figure 3.1:** Conceptual framework of this research, based on Walker (2012) and Schlosberg (2004, 2007).

## 3.3. 'Justice' in Making Environmental Justice Claims: Schlosberg's Multi-Dimensional Environmental Justice

As briefly indicated before, David Schlosberg (2004, 2007 and 2014), defines environmental justice by integrating social and ecological justice theories. According to Walker (2012), this responds to the justice component of the framework for making environmental justice claims. By discussing three dimensions of environmental justice, respectively, distributive, recognitional and participative (procedural) dimensions, the following sections introduce the ideal 'justice' in environmental processes. In addition, they clarify the patterns of environmental justice, based on which empirical analyses are undertaken in the environmental justice literature (see Chapter 6, 7 and 8). Later in Chapter 9, they will be revisited, since this research eventually contributes to these dimensions by proposing additional patterns for consideration in the study of environmental justice.

### 3.3.1 Justice as Distribution

#### 3.3.1.1. Defining Social Justice: Justice as Distribution

Distributive aspects have long been considered as the backbone of justice studies, including environmental justice. This can be best illustrated through David Miller's (1992: 555) overview of distributive justice, where the terms social justice and distributive justice are used interchangeably. As discussed in this section, social justice theories have been utmost developed on the grounds of whether goods, rights, liberties, freedoms, income, wealth, sanctions, punishments, well-being, pleasure, resources and so on should be distributed across the society or not. If the answer to this question is yes, they then aim to elaborate on the potential answers to these questions, such as how those distributions should take place, who should get what, and what sort of distribution can be defined as just. Theorists approach these issues differently, and it is impossible to cover all of them in this section, yet it is still important to give the major theoretical debates of distributive justice. Accordingly, this section focusses on four mainstream interpretations of distributive justice, namely the utilitarian interpretation of John Stuart Mill; the egalitarian interpretation of Ronald Dworkin; the libertarian interpretation of Robert Nozick; and the Rawlsian (contractarian) interpretation of John Rawls.

Firstly, utilitarianism, a concept developed by the philosopher John Stuart Mill, is widely used in social sciences, especially in economics, political science and justice studies. The main assumptions of the concept rely on the term of 'utility', which is defined by Mill (1972: 6) as:

> 'Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, and the absence of pain; by unhappiness, pain, and the privation of pleasure.'

In one of the prominent compilations discussing utilitarianism, on the other hand, Amartya Sen and Bernard Williams (1982: 4) broadly define utilitarianism as 'a choice of actions on the basis of consequences, and an assessment of consequences in terms of welfare'. These two definitions hint that the concept of utilitarianism is explicitly associated to justice, with its focus on 'right' and 'wrong', and welfare. Here also it also focusses on 'social choice', which should be carefully noted, since utilitarian understanding prioritises the rational choices of individuals to boost their utilities/happiness in their understanding of social justice. This will be explained in the following paragraph.

Utilitarianism, and its understanding of justice, can be attributed as being individualistic, as it is rooted in the liberal tradition. For instance, Roemer (1996: 127), influenced by Jeremy Bentham's philosophy, describes utilitarianism as a 'belief that…society should seek to achieve the greatest good for the greatest number', where he defines the utilitarian understanding of social justice as the maximisation of the sum of individual utilities, as also underlined in Sen and Williams (1982) and Hoffman and Spitzer (1985). This can be justified through Mill's (1972: 42) assertion that an understanding of justice 'varies in different persons, and always conforms in its variations to their notion of utility', while reinforcing the individualistic nature of the concept. From this point of view, Mill's identification of 'injustices', which is, for him, deemed as essential to define 'justices', would make more sense. He names the violation of legal rights and breaching agreements, the existence of partial institutions in provision of justice, the obtainment of rights and goods that are undeserved and the existence of bad laws as the major social injustices. These identified injustices are revealed in terms of their impacts on the fulfilment of individual utilities and choices in society (Mill, 1972). Accordingly, he focusses on two things in his formulation of justice, which are the rules and feelings, or in his words, sentiments. That is, rules should be fair, and should equally apply in rewarding good for good and punishing bad for bad, and

people should have the freedom to choose what makes them happy (Mill, 1972). For him, 'the highest abstract standard of social and distributive justice' is an equilibrium 'which all institutions and the efforts of virtuous citizens should be made in the utmost possible degree of converge' (Mill, 1972: 58). In this equilibrium, individuals, as rational beings, are allowed to decide on what is right for them within the existing institutional frameworks. Depending on this theoretical background, as also scrutinised by Hoffman and Spitzer (1985), it could be finalised that a society can be called just when the rules, especially the ones about property rights and economy, are clearly defined and applied, and give people freedom to choose what makes them happy. A societal distribution of goods based on these principles is considered 'just', since it is believed to make the greatest proportion of society happy eventually.

Secondly, egalitarianism is considered to be one of the most influential philosophical movements shaping justice studies, and is more community-oriented than the abovementioned utilitarian understanding of justice. As explained below through other bodies of research, it is also predominantly concerned with the distributive dimensions of social justice. Although egalitarianism and its formulations of social and distributive justice vary, their sole focus is on 'equality'. That is, the egalitarian understanding of justice centres on the notion of equality, regardless of how equality and equal distributions are defined, as understood through the brief examination of the existing literature (see Dworkin 1981; Cohen, 1989; Wolff, 1998 and 2010; Anderson, 1999; and Scheffler, 2003). Core disagreements among egalitarian philosophers originate from this point, since there are ongoing debates in the literature on the definition of equality and what should be distributed equally. According to Dworkin (1981), for instance, the equal distribution of resources (income and wealth) under certain conditions would be the answer to these questions, while Anderson's (1999) answer would centre on the notion of 'democratic equality'. Scheffler (2003:13) construes that egalitarian literature concentrates on equal distributions of material goods like 'welfare, resources, opportunity for welfare; and access to advantage' in the attainment of social justice, while promoting the social and political ideals of equality. According to Scheffler (2003: 8), justice and equality should be considered as 'a moral value or normative ideal', which has been overlooked by the earlier contributions to literature on egalitarianism.

However, regardless of philosophers' focusses on different social conditions, which can be interpreted as societal inequalities, egalitarians generally aim to address them through equal

distributions in defining their understandings of social justice. For instance, Cohen (1989) argues that certain groups of people face unequal treatments due to their 'bad luck', stating that these groups are relatively worse-off due to, for instance, their disabilities, class, gender, or race. These attributes are not deliberately chosen by them, but they rather happen to belong to them (Cohen, 1989). The conditions of those groups would be improved through the equal distribution of welfare and resources. Dworkin (1981) also makes similar points, yet he highlights the necessity to implement a mechanism to understand the reasons behind the deprivation of certain groups. Accordingly, his understanding can be attributed more as being merit and need-based, which is against the blind distribution of welfare and income across the society, which would lead to undeserved final distributions in certain groups, such as lazy or irresponsible people. In another example, Anderson (1999) convincingly discusses the necessity of democratic equality, the lack of which can be attributed as the main cause of unequal distributions in a society, when conceiving her egalitarian understanding of social justice. Her claim can be clarified through the following passage:

> '[D]emocratic equality offers a way of conceiving and harnessing human diversity so that it benefits everyone and is recognized as doing so. Democratic equality conceives of equality as a relationship among people rather than merely as a pattern in the distribution of divisible goods. This helps us see how egalitarians can take other features of society besides the distribution of goods, such as social norms, as subject to critical scrutiny. It lets us to see how injustices may be better remedied by changing social norms and the structure of public goods than by redistributing resources. And it allows us to integrate the demands of equal distribution and equal respect, ensuring that the principles by which we distribute goods, however equal resulting patterns may be, do not in fact express contemptuous pity for the beneficiaries of egalitarian concern (Anderson: 1999: 336)'.

Despite such differing formulations of distributive justice, egalitarian understanding promotes the notion of equality as the key condition in defining social justice. However, the conditions, reasons, scope and subjects of (un)equal distribution remain yet undefined in the literature (as understood from this brief evaluation of the egalitarian understanding of distributive justice). Still, these influential works of egalitarian philosophers allow for the generalisation that the equal distribution of material and non-material goods under certain conditions should be ensured in a society, and that this is expected to bring/enhance social justice.

The third major philosophical movement, contributing to studies in justice, is libertarianism. As a broad branch of philosophy, libertarianism also has different variations, which are

impossible to cover here full (see Friedman, 1997; Mack, 2009; and Van Parijs, 2009). Wolff (2006: 1605) generally defines libertarianism as a school of thought that 'is associated with the idea of minimal state, restricted to the narrow functions of protecting citizens from each other (and from non-citizens), providing for the enforcement of private contracts'. Accordingly, proponents of this idea advocate a fully functioning market economy guaranteeing property rights and competition and imposing either no or minimal taxes on the individuals (Wolff, 2006). In line with this very brief definition of the idea, distribution emerges as the main focus of libertarian philosophy and its justice understanding, in which any distribution attained under a fully-functioning market economy where state intervention is minimal is regarded as just, since libertarian thought characteristically tends to consider the free market economy as just (see Smith, 1994). Indeed, justice theories centring on this idea and focussing on distributive notions become influential in the literature, where Robert Nozick emerges as a prominent figure.

Nozick's seminal theory of *distributive justice*, which has the same title as his famous article, engages with the formulation of 'entitlement theory'. In this article and his various works, Nozick (1973) examines how people become entitled to achieve their holdings. This can be clarified through the following quote:

> 'If the world were wholly just, the following inductive definition would exhaustively cover the subject of justice of holdings.
>
> (1) A person who acquires a holding in accordance with the principle of justice in acquisition is entitled to that holding.
> (2) A person who acquires a holding in accordance with the principle of justice in transfer, from someone else entitled to the holding, is entitled to the holding.
> (3) No one is entitled to a holding except by (repeated) applications of (1) and (2).
>
> The complete principle of distributive justice would say simply that a distribution is just if everyone else is entitled to the holdings they possess under the distribution (Nozick, 1973: 47).'

Such a formulation of justice significantly prioritises the process-oriented approach in judging the distributive ends. In other words, this understanding hints at the necessity to examine how any acquisitions are attained in a society. For instance, holdings acquired through theft, fraud, threat, and/or coercion are likely to be considered as unjust according to Nozick (1973). To address unjust distributions stemming from such activities, he introduces the principle of 'the rectification of injustice in holdings', which is regarded as a key principle

in his understanding of justice (Nozick, 1973: 48). In this principle, Nozick brings out additional principles of justice to justify his claims, which are *historical principles*, referring to the necessity to bring the entire distributive processes into greater focus to understand if a distribution is achieved justly; *end-result principles*, focussing on the structures administering the distribution process; and *patterning*, where he prioritises the dimensions of moral merit, usefulness to society and needs when judging distributive justice (Nozick, 1973: 50-52). Accordingly, instead of supporting an equal distribution as proposed by egalitarians, this understanding justifies unequal distributions in favour of, for instance, talented and hardworking people, who are believed to reach their fair share of distribution under a fully-functioning market economy. It may be regarded as the reason why the entitlement theory has become mainstream, which is even frequently appealed by leftist theories, since it justifies self-ownership of the products that one puts his/her labour into, through those additional principles summarised above (see Mack, 2009).

In addition to these schools of thought, there is one more mainstream understanding of justice that needs mentioning. Rawls (1971) concentrates on the notion of fairness in his theory of justice, and he names it as 'justice as fairness'. Distributive issues are the focal point of this understanding (see also Rawls, 1985, Schlosberg, 2007). It heavily depends on the works of philosophers like Thomas Hobbes, John Locke and Jean-Jacques Rousseau. Their debates on 'social contract' are key in Rawlsian social justice. This defines his theory as being contractarian, referring to the insistence on the idea of mutual and rational agreement on moral values and distributions in a society (see Stark, 2000). Rawls (1971) argues that everyone starts life under different circumstances which influence their choices, actions and life, and which also define the existing inequalities occurring in a society. To eliminate these deep social inequalities, he proposes two hypothetical concepts that address the roots of these inequalities. The first one is the concept of 'original position', which 'is the appropriate initial status quo which insures the fundamental agreements reached in it are fair' (Rawls, 1971: 17). Accordingly, he maintains that these fundamental agreements, and any decision taken by the parties of the original position, should be acceptable for the society. This is especially true when they are concluded behind 'a veil of ignorance', which is his second concept. The veil of ignorance refers to the hypothetical settlement, where

> 'no one knows his place in society, his class position or social status; nor does he know his fortune in the distribution of natural assets and abilities, his intelligence and strength,…his conception of the

> good, the particulars of his rational plan of life,…the special features of his psychology…[,] the particular circumstances of their own society… [such as] its economic or political situation, or the level of civilization and culture…[in addition] to which generation they belong' (Rawls, 1971: 137).

He proposes that justice should be attained through social cooperation between the parties in the original position, who operate behind a veil of ignorance. He believes that the governing principles of a society would be fairly indicated only if those conditions are met in the original position. Accordingly, Rawls (1971: 60-61) indicates that

> 'the two principles of justice…would be chosen in the original position… First: each person is to have an equal right to the most extensive basic liberty compatible with similar liberty for others. [Paragraph indention ignored] Second: social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be everyone's advantage, and (b) attached to positions and offices open to all'.

He maintains that when the parties of the original position agree on a social contract behind a veil of ignorance, institutions would be restructured and operated; rules would be set fairly and social goods like liberty and opportunities and goods like wealth and income would be distributed equally among the members of society. For this reason, social cooperation and mutual and rational social agreement are seen as the means to reach a fair society, in which rules, freedoms, and social and physical goods can be equally distributed. He cautiously highlights that any potential unequal distribution of social and physical goods, rules and institutions would be acceptable only if those unequal distributions would improve the conditions of the least advantaged groups, and if they are agreed by the parties of the original position (Rawls, 1971).

In conclusion, distributive notions are attributed as the backbone of the justice studies. In all four mainstream understandings of justice, the central concern is the distribution of the goods and rights in a society. The first three understandings of justice, which are utilitarian, egalitarian and libertarian, and their formulations of distributive justice, would be best clarified through Amartya Sen's (2009) famous flute story. Briefly, according to Sen (2009), in an imaginary village, there is one flute waiting to be distributed among three children. One child demands it as the producer of it, the other one expects it since s/he is the only one who knows how to play it; and the final one wants it since s/he is the poorest one and does not have any toys. Depending on the brief explanations provided above, the utilitarian view might call the distribution just if the flute was given to the child who knows how to play it, since

this child would be happier and utilised more compared to the others. An egalitarian stance would support the poorest child to receive the flute, since s/he is considerably worse-off and does not have any other toy to play with, compared to the other children. Libertarian thinking would determine that the child who makes the flute should own it, since s/he is entitled to keep the product as its producer. On the other hand, aside from these three theories, Rawls' seminal 'justice as fairness' focusses on the just distribution of goods and rules across the society. This should be based on a social contract, agreed by the parties of original position, behind a veil of ignorance. Sen's story and Rawls' understanding of justice not only summarise the main scope of the abovementioned social justice theories and their distributive focus, but they also show the subjective and pluralistic characteristics of the concept of justice, which have different convincing accounts. In the next section, the concept of environmental justice will be discussed in relation to its distributive dimensions.

#### 3.3.1.2. Distributive Justice in Environmental Justice Literature

The dominance of distribution-oriented explanations of environmental policies constitute the backbone of analysis into environmental justice, especially in the literature's early phases. As noted by Swyngedouw and Heynen (2003), the majority of early works on environmental justice tend to focus on distributive aspects of pollution and waste policies of the US, at the expense of racial, minority and low income groups, along with a Rawlsian approach of justice as fairness. While this focus has been broadened through the inclusion of additional justice dimensions to the concept's theoretical foundations (see Schlosberg, 2007), the distributive focus of the concept has also been enriched with the integration of different patterns, neglected earlier in the relevant literature. Accordingly, this section explores reflections of distributive justice on the concept of environmental justice. The first part briefly introduces the distributive focus of early studies into environmental justice, centred on the distribution of environmental burdens and benefits across society. The second part moves towards the succinct elaborations of the additional patterns of distributive environmental justice, such as distribution of environmental risks, responsibilities, and vulnerabilities. These patterns have been recently argued in the literature (see Davoudi and Brooks, 2014). The third part concentrates on the notion of justice to nature, and explains how distributive notions on ecological justice are perceived within literature.

Firstly, early environmental justice studies particularly focussed on the ***disproportionate allocation of environmental burdens and benefits*** (pollution and waste) across society, predominantly in relation to class and race (for example, see Shrader-Frechette, 2002). In other words, early environmental justice scholars explained outcomes of the environmental policies in the US within the context of environmental racism, which is strongly associated with distributive notions (Sze and London, 2008). The main patterns of these environmental justice studies were distributive analyses of geographical proximity of disadvantaged groups to environmental hazards (Walker, 2009). They were mainly 'concerned with the just redistribution of resources and how they are channelled from those who have to those who have not' (Davoudi and Brooks, 2014: 2688).

These analyses are strongly connected to the Rawls' interpretation of social justice. Although Rawls' theory of justice does not particularly build an environmental justice theory, early environmental justice scholars attempted to place the environmental justice movements with his theory of justice as fairness (Been, 1993). For instance, Collin, Beatley and Harris (1995) claim that the equitable distribution of environmental resources may be considered along with the second principle of Rawls', introduced above, which aims to overcome social and economic inequalities existing in society via the participation of all parties into decision-making processes. Coughlin (1996: 72) also suggests that Rawls' theory of justice can be useful in defining movements in environmental justice, since it 'permits maldistributions of resources that favor the least well off…[and] provide[s] considerable support for maximizing benefits to socially disadvantaged persons'. Apart from such explicit efforts of scholars to correlate Rawls' theory of justice as fairness with the environmental justice concept, it can be claimed that the Rawlsian understanding of justice as fairness is implied as the ideal justice situation in the early studies into environmental justice. These works stress the disproportionate allocation of the environmental hazards at the expense of disadvantaged groups, which are supposed to be mitigated through the full participation of those groups into the decision-making processes (see Swyngedouw and Heynen, 2003; Holifield, Porter and Walker, 2009; and Davoudi and Brooks, 2014).

Scholars also frequently link environmental studies with risk studies literature, the distribution of which can be seen as one of the additional dimensions of the distributive environmental justice. As another contested concept (Satterfield, Mertz and Slovic, 2004), risk can be defined as 'likely consequence', referring to 'the combination of the probability

of a hazardous event and its negative consequences' (Smith, 2013: 11, emphasis omitted). Beck (1992) explicitly contends in his monumental work of *Risk Society* that contemporary environmental problems like pollution, waste siting and habitat destruction are attributed as risks, which are mostly the products of modernisation processes. They are distributed unequally within the society, along with several factors including class difference. In other words, he underlines that not all of the segments of the society are equally subjected to ***environmental risks***, where he exemplifies, but not classifies as the only reason, that poor communities are more likely to be exposed to risk. Beck (1992: 49) also argues that the disproportionate distribution of (environmental) risks at multiple scales causes 'anxiety' in a society, which later 'becomes a political force', when he implies the environmental justice dimension of development policies. Early studies into environmental justice should be examined along with these arguments, since the early movements in the US reflect the 'anxiety' of the disadvantaged communities which has then turned into 'a political force'. These early environmental justice movements also imply that certain groups like racial, minority and low-income ones are likely to be affected more from the unequal distribution of environmental hazards and risks in the US.

Zimmerman (1993) identified one of the first explicit linkages between environmental justice literature and risk. She analysed the distribution of waste siting and pollution and associated risks to them at the expense of racial, minority and low-income groups, as a case of social and environmental inequity. This approach was mirrored in the studies like O'Neill (2003), Satterfield, Mertz and Slovic (2004), Maantay and Maroko (2009) and Walker and Burningham (2011). Particularly, studies including Giroux (2006), Johnson (2008) and Bullard and Wright (2009), undertaken in the post-Katrina era in New Orleans, have aligned environmental justice with analyses of distribution of environmental risks across the society. All of these studies highlight that unequal distribution of risks, or perceived risks, across society, could be integrated to environmental justice claims. This is because not all of the segments of society (depending on its racial, ethnic and economic compositions) perceive the same levels of risks originating from environmental policies. This approach has ultimately paved the way to the consideration of the potential impacts of environmental policies as matters of justice, rather than relying on outcome-oriented analyses that only concentrate on the final distributions of environmental hazards.

Since these early studies, literature has shifted its focus towards analyses centring on the ***vulnerabilities***. This has occurred particularly through the integration of risk-oriented analyses to literature concerning environmental justice, in addition to the disproportionate allocation of environmental hazards. Walker (2009) and Walker and Burningham (2011) highlight that the distribution of environmental hazards and risks is not the only indicator of environmental justice. They signify vulnerabilities as a pattern of distributive analyses into environmental justice, since their examination sheds more light on environmental (in)justices. Hence the interface between risk, vulnerabilities and environmental justice, in the form of the distribution of environmental hazards, has become the one of the main subjects of environmental justice, where the unequal environmental impacts of issues like hurricanes (see Elliot and Pais, 2006 and Bullard and Wright (eds), 2009), flooding (see Walker and Burningham, 2011), environmental extremes like heatwaves (see Klinenberg, 1999) and pollution (see Sadd et al, 2011) are construed within the context of the distribution of vulnerabilities.

Vulnerabilities are broadly defined as 'the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard (an extreme event or process)' (Wisner et al, 2004: 11, emphasis removed). In the relevant literature, such as Harlan et al (2006), Bolin (2007) and Maantay and Maroko (2009), analyses on the distribution of vulnerabilities focus on how natural disasters and extremes impact on populations in an unequal manner. They also aim to reveal why certain groups feel impacts more than the others. Such vulnerability-oriented analyses refer to broader sets of patterns, including, but not limited to, 'occupation, caste, ethnicity, gender, disability and health status, age and immigration status…, and the nature and extent of social networks' (Wisner et al, 2004: 11). Certain groups may be exposed to environmental hazards and risks more than others, while they may also recover less easily due to their vulnerabilities (Wisner et al, 2004). In addition to those patterns, Cutter, Boruff and Shirley (2003) introduce single-sector economic dependence, density of built environment and wealth as important factors that define vulnerabilities. All of these factors influence exposure to and recovery from the environmental hazards. Wisner et al (2004) and Walker (2009) also highlight the broader issues of access to environment and livelihoods in this manner. Hence, as Bolin (2007: 122) contends, 'already existing social conditions…shaped contours of

disaster and the ways that marginalized populations variously endured continuing or increased disadvantages in the recovery process'.

Such analyses demonstrate that vulnerabilities are unevenly distributed across the society, dependent on several patterns. This affects recovery, social isolation, ability to respond and access to resources and mitigating policies (see Walker, 2009), which results in differentiated exposures to environmental hazards and risks. This then further deepens the existing vulnerabilities. Above all, focussing on these issues helps to readjust the focus of the concept of environmental justice from the simple geographic proximity analyses of environmental policies towards a more process-oriented one, which is likely to reveal how the environmental inequalities are conceived and how environmental policies have differentiated impacts within a society (Bolin, 2007; Walker, 2009; and Walker and Burningham, 2011). In line with this elaboration, vulnerabilities can be considered as a part of distributive analyses of environmental justice.

***Distribution of responsibilities*** is another pattern of environmental justice, since 'being subjected to the harms in which we had no choice or responsibility reinforces people's sense of justice' (Davoudi and Brooks, 2014: 2690). As Walker (2009) carefully notes, early movements in environmental justice in the US and UK, including the historic Warren County case, implicitly applied such a rhetoric. Specifically they focussed on the fact that environmental hazards, hitting certain groups, have not been particularly caused by them. This has had a key role in shaping those movements. This approach underlines that the feeling among communities regarding the distribution of responsibilities is an important driving force behind the environmental justice movements, and people's perceptions of justice. This can be furthered through Faber's (2008) work, when he demonstrates that polluter-industrial complex, which he defines as a number of elites in the US who shape economic, social and environmental policies (and legislations) to align with their own interests. The negative results of these policies then predominantly hit the poor communities (Faber, 2008). He highlights that socio-environmental problems like pollution, displacement due to poorly-designed development policies, habitat destruction and nature's commodification are caused by 'corporate-led globalisation…to the advantage of the United States', while 'poor peasants, workers, ethnic minorities, and indigenous peoples' of developing countries and the US are affected by them (Faber, 2008: 10-11). Through this analysis, he frames the inconsistency between winners and losers as a matter of environmental justice, which centres on the

argument that the analysis of responsibilities should be a complementary pattern of distributive environmental justice in investigating the disproportionate allocation of environmental benefits and burdens across society.

This area of research in environmental justice is primarily championed by scholars of climate justice. This literature on climate change, and its relation to the question of responsibilities and justice are broadly covered in the literature (see Hayward, 2007 and Caney, 2009), which will not be fully analysed here. It is still beneficial however to highlight these points, which could justify the relevance and subsequent inclusion of the distribution of responsibilities to analyses of environmental justice. As widely asserted in the literature, in addition to global climate change negotiations, the unequal distribution of the impacts of climate change and distribution of responsibilities underpin the backbone of climate change policies (see Paavola and Adger, 2006; Hayward, 2007; Page, 2008; Caney, 2009; and Schlosberg, 2013). As Paavola and Adger (2006) note, climate change negotiations and adaptation/mitigation policies are shaped by the countries' positions in contributing to the climate change and, in general, developing countries' unequal perceptions of the impacts of climate change alter despite their relatively lower contributions to this problem. For instance, policies debated and centred on the historical responsibilities of developed nations have reflected the understanding of 'common but differentiated responsibilities' in the relevant negotiations and documents like the Kyoto Protocol, which are frequently subjected to the justice analyses (Page, 2008).

In addition to the human-centric formulations of environmental justice, there are also attempts to incorporate eco-centric debates to the environmental justice concept. These come from the philosophical-ethical debates of ecological justice. Ecological justice, according to Low and Gleeson (1998:2), focusses on 'the justice of the relationship between humans and the rest of the natural world'. Rooted in the monumental works of Carson (1962) on the anthropogenic impacts on nature, Leopold (1968) on land ethics, and Naess (1973) on deep ecology, ecological justice revolves around the coexistence of the human and the non-human world, in addition to the necessity of posterity and the incorporation of the non-human world to the justice debates (see Dobson, 1999; Schlosberg, 2007 and Okereke and Charlesworth, 2014). Most importantly, such formulations and philosophical debates inevitably centre on the distributive concerns, fair distribution of environmental benefits and burdens on the

nature and towards the next generations, since the field is dominated by liberal justice theories (see Bell, 2006 and Wissenberg, 2006).

It can be claimed that ecological justice is committed to the clarification of the issue of justice providers and justice recipients (Baxter, 2005). Scholars base their accounts on the discussion of the morality/moral consideration of nonhuman nature and posterity (in distribution of environmental burdens and benefits). Accordingly, scholars such as Low and Gleeson (1998), Baxter (2005) and Schlosberg (2007) highlight that ecological justice necessitates the consideration of nature and posterity as members of the moral justice community. This community inherently perceived as the existing human beings as present, conscious and sentimental creatures. According to the relevant literature advocating the extension of the moral community of justice, there is nothing wrong with including nonhuman nature and posterity, although the reasons for their potential inclusion radically differ. As summarised in Low and Gleeson (1998), Beckerman (1999), Baxter (2005) and Schlosberg (2007), it can be attained either by focussing on the sentient nature of animals and other sentient creatures deserving moral consideration, or by contemplating the fact that nonhuman nature contributes to the functioning of the world and wellbeing of humans. Nonhuman nature and posterity can be considered within the justice community through, for example, prioritising the principle of reciprocity compelling current generation to consider the next ones since they have taken-over the planet from the previous one and is obliged to leave similar conditions. Or it can be attained by distancing ourselves from a human-centric understanding and recognising that all living organisms have equal rights on the planet. No matter the focus of such accounts is:

> ‘Once we accept that all living organisms [and posterity], sentient or non-sentient, possess moral considerability, by virtue of their possession of moral significant welfare interests, then it becomes a matter of distributive justice that they receive their fair share of environmental resources needed to meet those interests from those moral agents who are in a position to affect the distribution of those resources for good or ill.’ (Baxter, 2005: 149)

These succinctly reviewed patterns of distributive environmental justice provide a broad picture of ideal justice in the environmental processes. Accordingly, an environmentally just process should consider the proportionate distribution of environmental burdens and benefits/risk across the society, as well as vulnerabilities and responsibilities. In addition, these distributive patterns should be extended in a way considering non-human nature and

posterity for fairer environmental processes. Recalling the interdependency of the three dimensions of environmental justice, the issues covered in the following sections will also refer to the other two dimensions of environmental justice, which are analysed in the next two chapters.

### 3.3.2 Going beyond the Distribution: Justice as Recognition

#### 3.3.2.1 Recognition in Social Justice Literature

Recognitional dimensions of social justice are used by several scholars to challenge to the domination of distribution-oriented social justice understanding. Iris Marion Young and Nancy Fraser are two prominent scholars in this field; their works essentially contributed to the existing literature on recognitional justice. While Young (1990) gives priority to recognitional notions over distributive ones, Fraser (1995, 2001) analyses justice issues in a bivalent way, by defining distribution and recognition as the main pillars of social justice. In their works, both do not underestimate the early justice studies, concentrating merely on the distributional issues, but they deem that these early works are inadequate to explain all social injustices.

Young (1990) underlines that traditional social justice theories miss the larger picture, since they neglect social context behind the injustices. She points out the roles of social institutions, social relations and practices, which basically add social context to justice debates (Young, 1990). To reach to this conclusion, Young (1990) sets out her position by introducing ***oppression*** and ***domination*** as the starting points of justice debates instead of distribution. This point of view leads to the consideration of the roles of decision-making procedures, the social division of labour and culture. These are among the key aspects determining social injustices, and cannot be fully grasped by distributive justice, but rather can be explained by oppression and domination[9]. Young (1990) uses the social justice movements in the US,

[9] Young (1990) explains these three factors in detail. She considers division of labour in a society as an important factor, which is decisive to allow some groups to enjoy societal benefits while depriving others of them in relation to the social positions. Decision-making process, which is further examined in the following section, refers that the less participatory the system is, the more unjust it is since people who do not have proper access to decision-making process are deprived of enjoying the societal advantages (Young, 1990). Culture refers to a set of values such as habits, symbols, images and stories, which is also influential to decide what people will have in the society. Young (1990) further elaborates the impact of culture to social justice by exemplifying that dominant culture of a society may cause social injustices by blocking the full participation of people of minorities, by following the examples of the US society, where black and Hispanic populations were systematically facing with difficulties in the participation in the US social life.

which were once considered as distributive struggles by traditional justice theorists, as examples. According to Young (1990), many of the struggles of social groups such as African-Americans, Asians, Hispanics, environmentalists and women in the US are motivated by the relationship between oppression (by others) and domination (of others), rather than maldistribution of goods and services. For her, all of these injustices towards these groups are shaped by an institutional context, referring to 'any structures or practices, rules and norms that guide them, and language and symbols that mediate social interactions…in institutions of state, family, and civil society, as well as the workplace' (Young, 1990: 22). Therefore, she provides a convincing critique to the distributive understanding of social justice by adding this social context.

Nancy Fraser, on the other hand, explicitly names 'recognitional justice' in her research on social justice (1995, 2001). She contends for a bivalent justice understanding, where she formulates both redistribution and recognition as intertwined dimensions when explaining social injustices (Fraser, 1995, 2001). She classifies redistributive elements as economic (dis)advantages while she categorises recognitional elements as cultural (dis)respect (Fraser, 1995). Accordingly, the realms of redistribution and recognition, respectively as socio-economic or political economy, and cultural, are formulated in her understanding of justice, where she describes justice struggles (social justice movements) as the claims for both redistribution and recognition. She exemplifies the forms of injustices in the socio-economic realm, or political economy, as exploitation, economic marginalisation and deprivation. She also points to cultural domination, non-recognition and disrespect in the cultural realm. She combines these two realms by claiming that injustices occurring in these fields simultaneously affect each other. In other words, she underlines that

> '[c]ultural norms that are unfairly biased against some are institutionalized in the state and the economy; meanwhile, economic disadvantage impedes equal participation in the making of culture, in public spheres and in everyday life. The result is often a vicious circle of cultural and economic subordination' (Fraser, 1995: 72-73).

Thus, she highlights that socio-economic inequalities are the products of differences based on class, gender and race discrimination, the elimination of which requires broad structural transformations in a society (Fraser, 1995, 2001).

In conclusion, both Young and Fraser underline the necessity of thinking beyond distributional justice to explain and address injustices. They have subsequently broadened the understanding of justice by adding a social context to these analyses.

#### 3.3.2.2. 'Recognition' in the Environmental Justice Literature

In the previous section, recognition is regarded as one of the key components of justice. Schlosberg (2004: 519, emphasis exists in the original text) defines 'recognition' while formulating it in the context of environmental justice as

> 'that a *lack* of recognition, demonstrated by various forms of insults, degradation, and devaluation at both the individual and cultural level, inflicts damage to both oppressed communities and the image of those communities in the larger cultural and political realms'.

When the early literature is reviewed, it can be seen that scholars' attempts to associate the disproportionate allocation of environmental burdens (at the expense of racial groups in the US) implicitly underline the recognitional issues behind environmental injustices. For instance, Shilling, London and Lievanos (2009: 697) indicate that 'environmental justice movements [in the US] is based on the recognition that places in which people of color and low-income people…tend to bear a disproportionate burden of environmental threats'. This is associated with the notion of environmental racism (see Chapter 2). Accordingly, early studies in the US considered race and racism as the decisive factors leading to the unequal distribution of environmental burdens, as well as class and gender (Schlosberg, 2007). In the global context, instead of race and racism, poverty and culture are contended as the key factors behind environmental justice movements (see Martinez-Alier, 2002). Therefore, the lack of recognition of group differences, based on factors such as race, gender, class, age, and culture, are linked to maldistribution of outcomes in environmental justice studies, which indicate that environmental justice movements are not only struggles against the maldistribution of environmental burdens, but are also strongly motivated by the notion of recognition of such group differences (Schlosberg, 2007; Walker and Day, 2012; Gibson-Wood and Wakefield, 2013). Thus, environmental racism and cultural misrecognition can be given as examples of how environmental justice concepts reflect the recognitional notions of justice. These examples, constituting the backbone of the recognitional studies into environmental justice, were broadened through the introduction of the notion of place

stigmatisation, and the integration of notions of ecological justice to studies on environmental justice. These ideas are explained in the rest of this section

As discussed in Chapter 2, ***environmental racism*** was originally considered in the form of proximity of people of colour to environmentally problematic areas in the US. This concept is demonstrated by quantitative research, based on census tracts and statistics, showing the correlation between environmental burdens and proximity of racially and ethnically subordinated populations and these areas. With the evolution of the concept, these early studies were perceived as missing the underlying reasons of environmental inequalities. This is because the approach is biased by the search for the existence and/or intention of racism in the analyses, by ignoring the 'felt exclusions' in the society (Gibson-Wood and Wakefield, 2013: 646). Laura Pulido (1996a, 1996b, 2000) provides several comprehensive analyses of environmental racism, in which she concentrates on the underlying socio-historical processes of environmental racism and also methodologically taking environmental racism away from statistical correlations.

Pulido (1996a, 2000) criticises the early literature on environmental justice based on the fact that it misses the broad picture of racism in US society. She underlines that racism is a socially-constructed practice, which is embedded in practices, norms, values, discourses and institutions, including politics, culture and economics, the effect of which cannot be over-simplified through outcome-oriented environmental justice studies (1996a and 2000). She calls for a more systemic analysis of environmental racism through qualitative methods, and a socio-historical approach (Pulido, 1996a). In her frequently-cited work, *Environmentalism and Economic Justice: Two Chicano Struggles in the Southwest*, she underlines that '[b]y focusing on the inequitable siting of hazardous facilities and disproportionate exposure to pollution, we ultimately fetishize skin color or phenotype instead of developing a broader and deeper understanding of how inequality is produced' (Pulido, 1996b: 18). She takes Young's abovementioned pattern, concentrating on the relation between domination and subordination, and questions the ideology of racism, which determines 'subordinates' and 'dominants' in society (Pulido, 1996b: 42).

Pulido (1996b: 43) further explains that

> 'the most fundamental but least recognized form of racism is the existence of a racist ideology that allows for the creation of racial groups. In order to be effective, a racist ideology must become so pervasive and natural that it becomes hegemonic, and therefore, rarely questioned'.

Accordingly, even if the dominant group, which consists of whites in this context in the US, do not intend to be racist, the status quo provides them with privileges, and they eventually enjoy the implied racism (Pulido, 2000). Explained under the banner of ***white privilege***, it is inferred that environmental services, amenities and advantages are predominantly accessed and enjoyed by the white population even if these individuals do not intend to act in a racist way. This means that they remain as the main beneficiaries of an existing social structure shaped by racism (see also Agyeman, 1990 and Boone et al, 2009). Thus, environmental racism, pushed by environmental justice literature, may cut 'racism off from its ideological roots' through the reification of racism, which is merely considered as a material concept to be distributed within the society (Pulido, 1996b: 46). Therefore, she claims that the deep causes of the relationship between subordinate and dominant groups should be explored in social and cultural practices, which lead to the unequal distribution of material burdens and benefits (including environmental ones). The struggles should also be perceived as 'struggles over the nature and power of various identities' (Pulido, 1996b: 46).

The role of ***cultural differences,*** or ***cultural misrecognition*** is frequently used to highlight the recognitional notions of environmental justice. Accordingly, the recognition of different cultural practices is a significant factor that pushes communities to form environmental justice movements, especially in the developing world (Pena, 2005 and Schlosberg, 2007). For example, for the native people and indigenous communities who are displaced for the sake of eco-tourism development in developing countries, the main motivation of their search for environmental justice is to protect their lives, livelihoods, homelands and cultural affiliations with their lands (Pena, 2005). In other words, these people demand the recognition of their peculiar cultures in policy-planning process, rather than demanding equal distribution. Accordingly, Pena (2005: 131) emphasises the roles of culture and identity in Third World environmental justice movements as follows:

> 'The local is denied access to the means of right livelihood, the collective resources of the land, and the memories of place that sustain her identity, and all because of unjust acts of brutal enclosure for the sake of "economic development" or "wilderness preservation"'.

This builds on Pena's work in 1998, demonstrating the importance of cultures and identities in environmental justice movements, in that 'environmental justice battles are battles for the preservation of the "homeland environment" and local knowledges and senses of place that exist in those communities' (Schlosberg, 2007: 63). As hinted here, the issue of cultural recognition is also related to the notion of recognition of 'different ways of knowing the world' (Martin, McGuire and Sullivan, 2013). Martin, McGuire and Sullivan (2013) highlight the necessity to acknowledge and respect cultural diversity and local dynamics, especially in biodiversity conservation practices at the global level, which may be driven by economic gains, and may confine local cultures. Cultural recognition is also frequently referred to in studies of climate justice, particularly in relation to the recognition of indigenous communities in negotiations (see Tsosie, 2007). In light of such contributions, it can be understood that cultural recognition, or respect of cultural diversity, has become an integral part of analyses into environmental justice.

As proposed throughout this section, recognitional justice and recognitional environmental justice generally concerns the subordination of people, based on the factors such as race, gender, ethnicity and culture. The literature on these topics has been enriched by a group of scholars who focussed on the issue of the recognition of places in the environmental policy-processes, under the banner of '***place stigmatisation***' or 'misrecognition of places'. Generally applied in sociological urban studies, where it is used to explain the struggles of the ghettos (see, for instance, Garbin and Millington, 2012), the concept has also been utilised to analyse environmental justice cases centred on urban environmental justice (see Anguelovski, 2014) or the siting of waste facilities (see Llurdes, Sauri and Cerdan, 2003 and Simmons and Walker, 2004).

This concept is

> 'used to explain why particular cases, usually of proposed development-producing technological risks [such as waste sites and hydroelectric power plants], have generated particularly acute public resistance…Place stigmatisation…can result from the siting of stigmatised technologies, such that positive senses of place are threatened and replaced with associations of danger, threat and degradation (Walker, 2009: 626)'.

The social and environmental quality of a locality can be jeopardised or degraded by policies that disregard local values and environments (Walker, 2012). Place stigmatisation mainly

concerns the positive and negative senses of the place. Accordingly, Simmons and Walker (2004:92-93) define the positive senses of a place as 'positive feelings about one's own place [that] can…be constructed and reinforced by representing other places as less pleasant, more dangerous or in some other way alien and undesirable', by looking at locals' perception of a place based on its 'amenity, community, safety and…healthiness'. Negative senses of a place, on the other hand, are generally associated with 'disrepair, social problems, and an unwelcoming atmosphere', which are generally experienced by racial and ethnic minority groups and poor people (Anguelovski, 2013:1022).

Urban and environmental policies 'can have the effect -if not the intention- of destabilizing and further marginalizing their occupants' by either causing or strengthening the negative senses of a place in the policy process (Wacquant, 2007: 69). In other words, depending on the abovementioned stigmas, public policies, including environmental policies, are shaped and implemented in a way reflecting these stigmas, while reinforcing those that already exist (Walker, 2009). Such policy practices can be considered as the subject of an environmental justice analysis since it is believed that they contribute to the existing socio-environmental inequalities, while also creating the new ones (Anguelovski, 2014). However, such policy implementations do not remain unchallenged. Instead, they form one of the main motivations behind environmental justice movements, which are believed to disturb the existing positive senses of a place or further the existing stigmas. For example, Llurdes, Sauri and Cerdan (2003) claim that one of the reasons for the failure of siting waste plants in Catalonia was that the people around the proposed were sites strongly opposed to the potential stigmatising impacts of the plants, which might hit positive senses such as touristic importance, environmental quality and high-quality wine production. This example, and the general scope of the concept, underscore the requirement for the recognition of place, since such misrecognitions may eventually lead to socio-environmental injustices, and become the focal point of environmental justice movements.

There is a tendency in literature concerning environmental justice, to consider the concerns of ecological justice as a separate issue. The focus has, so far, remained human-centric, specifically studying the lack of recognition and participation, and the disproportionate distribution of environmental benefits and burdens among the society. The literature is blamed for being 'too narrow' in the definitions of 'environment' and 'justice' (see, for

instance, Anthony, 2005:92). Through the expansion of the concept, underlining the necessity of the plurality of the definition, there have been efforts to integrate ecological justice into the concept of environmental justice, which is thought to address such critiques (see Eckersley, 2004 and Schlosberg, 2007). The intention of this research is not to engage in these extensive philosophical debates, whether it is possible to merge them or not (Schlosberg, 2013; Schlosberg and Collins, 2014), but rather to concentrate on how nature should be the part of the analysis of recognitional environmental justice.

***The recognition of nature*** can be realised either through the recognition of the similarities between humans and nonhumans; or through the respect of its existing integrity. In addition, as Schlosberg (2007:139) underlines, it is also realised through the concentration on *status injury* of Fraser (1995, 2001), through which '[w]e can see nature injured, its interests ignored, autonomy dismissed, or its integrity damaged'. Schlosberg (2007: 140) exemplifies it through the case of climate change, in which

> 'we see all forms of status-injurious misrecognition- the domination of nature by extractive industries, the invisibility of nature in policy planning (even with warnings beginning decades ago), and the disparaging of the natural world in discussions of the mitigation of impacts on human communities at the expense of nature'.

In this sense, Eckersley (2004) explicitly highlights the necessity of the recognition of nature and future generations as the parts of justice community, although they are unable to provide their voices in the policy process. She deems it as the second best solution to realise environmental justice; where the nature and future generations should be thought of and represented in the policy processes 'as if' they are the members of the community. It is condensed as:

> 'The basic argument is that just because all differently situated others may not be capable of providing consent (and this applies to many humans, not just nonhuman others) ought not invalidate the moral claim that, within justifiable and practical limits, all differently situated actors (human and nonhuman) ought to be free to unfold in their own distinctive ways and therefore should not be subjected to unjustified policies and decisions that impede such unfolding (Eckersley, 2004: 120).'

In summary, the conventional understanding of environmental justice focussed on 'recognition', predominantly through the concepts of ***environmental racism*** and ***cultural misrecognition***, or in a broader sense, the recognition of group differences. However, with

the evolution of the concept, it is no longer the case. Issues, such as ***the recognition of non-human nature*** and ***place stigmatisation,*** are also integrated to this understanding. Addressing these patterns in environmental policy processes contributes to the formulation of ideal justice, as analysed through this chapter. These are discussed below in Chapter 7.

### 3.3.3. Going beyond the Distribution: Justice as Participation (Procedural Justice)

#### 3.3.3.1 Participative (Procedural) Justice in Social Justice Studies

Participative justice has been perceived as a distinct component of social justice, while also broadening the focus of the justice-related works beyond distributive justice. This component was initially contributed by social psychologists, works of whom were then enhanced by other fields of social sciences. Although the main intention of this section is not to review the broad literature on social psychology and procedural justice, the main findings and early contributions of this body of research are introduced briefly to demonstrate the roots of the concept, which are also incorporated to explain the procedural dimensions of environmental justice. Accordingly, this section elaborates the concept within the context of social psychology, followed by its reflections in the other fields of social sciences. Once again, it should be noted here that the intention is not to overlook other dimensions of justice, discussed in the previous sections; but it is rather to highlight the pluralist character of justice concept, and reaffirm the interconnectedness between these different dimensions (see Schlosberg, 2007).

Social psychologists initiate their analyses of procedural justice by exploring people's perceptions regarding the relationship between outcomes (of the policies) and processes (pursued in reaching these outcomes). Walker, Lind and Thibaut (1979: 1402) argue that 'the belief that techniques used to resolve a dispute are fair and satisfying in themselves', while defining procedural justice through examples of legal cases in the US. With such studies and subsequent case analyses undertaken by their followers (see Tyler and Caine, 1981; Rasinski, 1987), procedural justice is formulated as a separate dimension of justice in relation to the distribution. The main points discussed by these scholars were the principles of procedural justice and the explanation of legitimacy and acceptance of the decisions taken, based on the procedures followed in the policy processes (see Tyler and Smith, 1995 and Joss and

Brownlea, 1999). Tyler and Smith (1995: 10) explain the bases of social psychologists' understanding of procedural justice as follows:

> 'people are concerned with the way outcomes are distributed in groups…[,and] [i]n addition to evaluating the fairness of outcomes, people evaluate the fairness of the procedures by which those outcomes are determined.'

In other words, people's perceptions on policies' fairness are relevant to the outcomes of these policies as well as the procedures through which these outcomes are achieved. Social psychologists like Tyler (1990) detect the principals of procedural justice depending on their experimental works. For instance, based on Tyler's (1990) evaluation of public authority, Herian et al (2012:3) summarises these principles as

> 'the ability of individuals to express their viewpoint, the authority's consistency in its application of processes and transparency about how decisions are made; the respectful treatment of individuals, and the trustworthiness of the authority'.

Accordingly, it is argued that the (non)existence of such principles will determine whether a decision/policy is procedurally just or not.

Instances of procedural justice, especially in the form of participation, are found in the literatures of political science and philosophy, which constitute the significant portion of studies into justice. Since this field is too broad to be fully analysed, here procedural justice and participation are briefly investigated within the literature on recognition and deliberative democracy. Firstly, as indicated in the introductory section, the recognitional aspects of social justice are intertwined with the procedural aspects. When the literature on recognition and social justice is visited (see 3.3.2.1), it is seen that the analyses frequently refer to the notion of participation as an objective to attain social justice. Fraser (1995, 2003), for example, when introducing her bivalent understanding of justice (deeming justice as redistribution and recognition), indicates that 'parity of participation' is necessary to attain justice. She posits this participation as follows: 'justice requires social arrangements that permit all (adult) members of society to interact with one another as peers' (Fraser, 2003: 36). According to her, once economic inequalities and cultural domination are eliminated in a society, referring to the achievement of redistribution and recognition in the society, this parity is to be attained in said society, which will reinforce social justice (see Fraser, 2003). In contrast, Honneth (2004) puts a focus more on the elimination of disrespect and humiliation in society.

According to Honneth (2004), these are the main reasons for social exclusion and social injustices, hindering individuals in fully participating in the public realm. For him, love, equal treatment in law and social esteem are considered as the three principles of social justice, the attainment of which will eliminate clichés and stereotypes, foster equality and question cultural constraints (see Honneth, 2004: 358). He argues that individuals are to be emancipated, social exclusion is to be eliminated and social justice is to be reached by the achievement of these principles through participation. The attainment of these principles will eventually also promote the public participation in the social realm (Honneth, 2004).

While Fraser (1995, 2003) is keen to give equal importance to these components in her account, Young (1990) and Honneth (2004) tend to prioritise recognitional issues at the expense of distributive ones. However, these accounts do not explicitly discuss procedural justice (and participation) as a separate component of social justice, despite their explicit attributions to this notion. It is inferred from this literature that public participation in decision-making processes is thought of as a condition to achieve and sustain social justice. This is also observed in the critiques of these accounts. For instance, Bohman (2007) suggests a need to focus on the broader picture in international society, referring to structural exclusions, in explanation of the issues such as exclusion, maldistribution and domination, all of which lead to social inequalities. His main suggestion to eliminate these structural issues is the provision of minimum democratic freedoms to the people. Bohman (2007) claims that once democratic freedoms are attained in the society, the deliberation process will start, injustices such as domination, exclusion and maldistribution will be eliminated, and participation will be achieved in decision-making processes. In other words, his central concept is ‘freedoms’ rather than recognition and justice, although he explicitly formulates that these issues (recognition, distribution and justice) are to be improved through the provision of minimum democratic freedoms that can be regarded as fairer procedures (Bohman, 2007: 267). Similar to Young, Fraser and Honneth, Bohman’s analyses also invoke the role of participation and procedural justice in the eradication of social injustices, especially when he discusses the issues of deliberative democracy (see Bohman and Rehg, 1997).

The literature on deliberative democracy implies the significance of participation in decision-making processes, in addition to numerous procedural issues, while clearly indicating them

as conditions to attain social justice (see Bohman and Rehg, 1997; Dryzek, 2000; and Young, 2002). According to Dryzek (2000:1),

> 'deliberation as a social process is distinguished from other kinds of communication in that deliberators are amenable to changing their judgments, preferences, and views during the course of their interactions, which involve persuasion rather than coercion, manipulation, or deception.'

This definition of deliberation implies that it is a process, in which communication needs to be effectively used by the social actors to persuade each other in a policy process, where they are supposed to be free from any kind of domination. Along with this understanding, deliberative democracy can be broadly defined as an

> 'idea that legitimate lawmaking issues from the public deliberations of citizens. As a normative account of legitimacy, deliberative democracy evokes ideals of rational legislation, participatory politics, and civic self-governance (Bohman and Rehg, 1997:ix)'.

This definition puts a strong emphasis on the role of communication between the social actors, and promotes the notion of self-determination for active communication (see Young, 2002). According to scholars such as Dryzek (2000), Young (2002) and Fischer (2003), the process of deliberation, undertaken through an active social communication, is believed to overcome issues like distortion, domination, oppression, manipulation, threat and power asymmetries within the society, the attainment of which is relevant to the achievement of social justice. The following passage from Young (2002: 209) clarifies this relationship between deliberation and social justice as follows:

> 'If people suffer injustices, the first step in redressing them is being able to make claims upon others in a shared public forum that together they should take action to address these problems. If those with such claims can participate equally with members of dominant groups in political discussion and decision-making, they may be able to change the way others see the social relations in which they stand together, the problems they generate, and the priorities they should have for action.'

Thus, the notions of openness, representation, access to information, discursive tools like rhetoric, publicity, reciprocity, transparency, accountability, access to deliberative politics and limitations on the use of wealth and titles in participatory process are all regarded as the central elements of deliberation and deliberative democracy, while these concepts formulate a bottom-up approach in policy-making (Gutmann and Thompson, 1996; Bohman and Rehg, 1997; Dryzek, 2000; and Young, 2002).

In line with this brief explanation of the concept of deliberative democracy and deliberation, it could be claimed that the scholars working on the concept of deliberation prioritise the concerns about procedural justice, without using the term explicitly. These concepts contribute significantly to the procedural dimensions of social justice literature, though it is not the main intention of the scholars. As clearly demonstrated in the quotations above, it revolves around the attainment of a public forum, in which people can actively participate, communicate and negotiate about the policy issues. These actions are the basis for the public participation, and guide the attainment of 'fair procedures'. To achieve the latter, themes such as transparency, access to information, representation, and accountability are put toward as the main motivations of this deliberation process. Their provision is required for an effective process, one that may eradicate the societal injustices through a more inclusive and more participatory decision-making process. It can be noted that the decisions undertaken through such a process are likely to be procedurally fairer, and so are likely to be considered as legitimate in the eyes of people. Thus, it is highlighted that the literature on deliberation and deliberative democracy significantly contribute to the theoretical background of procedural dimensions of social justice through the prioritisation of active public participation.

In conclusion, the concepts of procedural justice and participation are explored within the field of social justice, depending on disciplines of social psychology, philosophy, and political science. Although the aims, methodologies and contents of these fields are different, these theoretical elaborations contribute to the procedural dimensions of social justice, either explicitly, as conducted by social psychologists, or implicitly, as a component of broader explanations as undertaken by philosophers and political scientists. Above all, all these explanations significantly highlight that procedural justice, predominantly explored within the context of participation, is necessary to achieve social justice in a society; and, together with distributive and recognitional justice, it constitutes the broader understanding of social justice. Thus, the notion of procedural justice can be contemplated as a separate dimension of social justice. In the following section, this discussion is carried out within the context of environmental justice.

#### 3.3.3.2 Procedural Justice (Participation) in Environmental Justice Literature

It is necessary to examine how social psychologists' contributions are incorporated to the environmental studies, although the majority of these works do not explicitly refer to the

concept of environmental justice. In a few studies conducted in the 1990s, scholars like Lawrence, Daniels and Stankey (1997), Joss and Brownlea (1999) and Syme, Nancarrow and McCreddin (1999) used the arguments of the social psychologists. These works explore the relationship between the outcomes and processes of environmental management, where it is believed that fair and participatory processes in environmental management are likely to be widely accepted, and will lead to fairer outcomes. In those studies, principles, which are used to assess the procedural justice issues within environmental management, are the modifications of the early findings of the social psychologists (see Section 3.3.3.1). In other words, these works do not go beyond the analyses undertaken by social psychologists, where they only extend the outreach of the social psychology discipline towards environmental studies. Yet, such studies are worth mentioning to demonstrate the changing trend in environmental studies, where justice issues have been considered in a broader sense, which previously had been solely examined within the context of distributive justice.

In addition to this research tradition, instances of procedural (or participative) justice are found in early environmental justice studies. Although these studies are regarded as being too distribution-oriented, they imply the procedural dimensions of the concept (see Shrader-Frechette, 2002). For example, Robert Bullard's definition of environmental justice as 'the principle that all people and communities are *entitled to equal protection of environmental law and public health laws and regulations* (1996: 493, emphasis added)' as well as his reference to the underrepresentation of people of colour in environmental decision-making (see Bullard, 1993), both draw attention to the procedural aspects of environmental justice, while demonstrating the existing procedural injustices in environmental justice movements in the US. This becomes clearer when looking at the *Principles of Environmental Justice*, adapted in 1991 by the delegates of First National People of Color Environmental Leadership Summit in the US, in which there are explicit attributions to the procedural justice issues (2.2.1). For instance, Principle 7 clearly indicates that people need to be treated equally and to be included in environmental decision-making, while the other Principles formulate the rights of minorities and necessity of the equal implementation of environmental laws. [10] Such works point toward the procedural dimensions embedded in the concept of environmental justice, even when it was a discipline investigating these issues predominantly within

[10] See the principles in ejnet.org (1991 [2015]) in 2.2.1.

distributive concerns. It was in the 1990s when procedural justice started to be seen as a separate component of environmental justice.

Among these studies, Zimmerman (1993: 633) argues the general focus of environmental justice as 'procedures to ensure fair distribution', while Torres (1994) makes an explicit claim when he states that many of the environmental justice movements in the US highlight non-inclusive and undemocratic decision-making processes, rather than simply concentrating on the disproportionate allocation. Following this tradition and criticising the early environmental justice works due to their overemphasis on the issue of distributive justice, there are scholars like Lake (1996), Hunold and Young (1998), Kuehn (2000), Shrader-Frechette (2002), and Ikeme (2003), who advocate a bivalent understanding of environmental justice by formulating procedural justice in relation to distributive justice. According to Lake (1996), for example, outcome-oriented analyses of early environmental justice studies should be criticised since they overlook the institutional causes of injustices. He claims that it is procedural justice, which draws the attention to injustices inherited in the decision-making processes that should be carefully analysed to address the deep causes of the environmental injustices (Lake, 1996). Shrader-Frechette (2002), on the other hand, promotes a liberal understanding of justice, while discussing the necessity to include ethical considerations and participative issues within environmental governance. Her suggestion is to undertake environmental justice studies as a combination of distributive and procedural justice understandings, where she applies the *principle of prima facie political equality* as the basis of environmental justice studies, presuming 'that equality is defensible and that only different or unequal treatment requires justification, that the discriminator bears the burden of proof (Shrader-Frechette (2002: 27)'. By doing so, she covers numerous procedural issues such as public participation, free informed consent, minority rights and inter-generational justice as the prerequisites of environmentally-just policies.

Contributors with different perspectives put different aspects of the procedural environmental justice forward. Paavola (2007: 97), for instance, discusses that the legitimacy of the environmental policies 'have to reflect both distributive and procedural justice concerns'. He underlines the significance of the procedural justice in environmental decision-making since, he believes, fairer procedures and decision-making processes may facilitate social learning, demonstrate whose interests and values are represented in the process, lead to the transformation of bias and values, resolve the environmental conflicts and achieve maximum

representation, as a result of which legitimacy of the environmental policies can be achieved (Paavola, 2007). Shrader-Frechette (2002), on the other hand, highlights the importance of information sharing in which she promotes 'free informed consent', requiring 'professionals…to help [the public] overcome illness, irrationality, immaturity, distorted information, or other factors that can limit their grasp of the situation (2002: 108)'. Furthermore, she asserts that 'voluntariness' is needed, which means 'that the subjects are acting in a way that is free of manipulation and coercion by other persons (2002: 126)', the provision of which result in 'procedurally just interaction' in environmental governance. Walker and Day (2012: 72), furthermore, frame procedural environmental justice within the context of the Aarhus Convention, where 'access to information, access to and meaningful participation in decision-making and access to legal processes for achieving redress or challenging decision-making processes' are introduced as the prerequisites of procedurally-just environmental policies. Within the same context, scholars like Mason (2010) and De Santo (2011) also commit to the Aarhus Convention. Mason (2010: 11), for instance, claims that the Convention strengthens the understanding of environmental justice through promoting 'citizen access to environmental information… [and] helping to secure more transparent and accountable regulatory processes'.

In addition to these issues, concepts of deliberation and deliberative democracy are reflected, especially in studies by Lake (1996), Hunold and Young (1998), and Kuehn (2000) who highlight the necessity to consider procedural justice concerns in a separate manner to reinforce the procedural dimensions of justice in environmental policies. For instance, Lake (1996:165) prioritises the concept of self-determination, which he defines as 'an ability not only to select among a set of options but also to determine the options presented for consideration', and increased local autonomy in environmental decision-making, while advocating for fairer processes by giving the locals a voice in environmental decision-making process for fairer processes.

Hunold and Young (1998) conducted one of the most specialised studies, applying deliberative democracy to environmental justice, where they focus on the procedural issues contributing to deliberative democracy (see Section 3.3.3.1). They claim that a fairer process should include a decision-making process where everyone's interests are represented, access to information is achieved, advance negotiations among stakeholders are conducted, and their opinions and alternative policies are discussed. They use a Swiss waste management case,

where intense negotiations, forum debates, and high encouragement of the administration for citizen participation were experienced, which eventually influenced the siting decision as a result of this deliberative process.

Within these discussions, one concept emerges as 'the central concern of procedural environmental justice': ***Meaningful Participation*** (Holifield, 2012: 592). Accordingly, almost all works on environmental justice cited throughout this section identify meaningful participation as a prerequisite for attaining justice in environmental governance (see, for instance, Schlosberg, 2003; Paavola and Adger, 2006; and Holifield, 2009). Although the concept can be defined in different ways, Solitare's (2005: 921) approach to the concept as 'successful communicative planning requir[ing] conditions that allow all citizens to participate freely and equally' is seen as one of the broadest and most open-ended definitions of the concept.

The prerequisites of meaningful participation have been seen in two ways. In the first one, Solitare (2005: 921) lists the conditions of meaningful participation as:

> 'For citizens to want to participate: (1) there must be a commitment to their involvement from all …; (2) they must be aware of the opportunities to participate; (3) they must have time, as a resource, to commit to the process; (4) they must trust that other[s] are fair and honest; and (5) the issue under consideration must be one they perceive to be a problem.'

The US EPA (2013), on the other hand, defines them as follows:

> 'Meaningful involvement means that: (1) people have an opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) their concerns will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected'.

As seen from these two approaches, the prerequisites of meaningful participation are not radically different. By the provision of such prerequisites, it is advocated that meaningful participation should be ensured in environmental governance. This makes the process fairer, and ultimately the decision is widely accepted by the community. It is because the representation of affected population can be ensured and decisions taken as a result of such an inclusive process can possibly be regarded as legitimate, since it gives a chance for the affected population to influence the decision-making process (see Solitare, 2005; Paavola and Adger, 2006; Holifield, 2012; see also Section 3.3.3.1). Although there are similarities

with the deliberation, this concept is more open-ended and more applicable to the contextual studies.

The procedural dimensions of environmental justice, however, cannot be limited to the abovementioned anthropocentric issues. They should also include the concerns of ecological justice, to deepen the practical application of the concept and put more emphasis on the environmental side of it. Accordingly, the discussions conducted in the previous two sections should be extended towards the procedural dimensions of ecological justice. At this point, it is important to highlight that, with a few exceptions, notably Schlosberg (2007), scholars have not discussed ecological justice exclusively in relation to procedural (environmental) justice and participation. However, academic works originated in environmental ethics, philosophy, and politics touch on the relationship between ecological and procedural justice.

Discussions of these issues in the fields of ethics and justice are cautious to include nature as an agency and actor that can directly participate in policy processes. In other words, the dominance of liberal thinkers in formulating these concepts has made these issues highly anthropocentric. Human interests in nature are highly prioritised at the expense of the nature itself. Nature is seen as natural resource, and is external to human activities (see Coglianese, 1998). Posterity's consideration is also overruled due to its physical non-existence (see Wissenburg, 2006). However, this exclusion of nature and posterity from the justice community has been challenged, and the justice community has been morally extended towards non-human nature and posterity. Although there are several different disciplines working towards this end, Goodin's (1992) and Dryzek's (2000) works are worth mentioning, both of which feature the co-existence of humans and nature. According to these works, nature and posterity should be internalised as agencies in decision-making processes and considerations of justice. On this issue, until this point, the debate to accept nature and posterity as a part of the justice community has been recalled, and no further claims have been made to the relate these issues to procedural justice and participation. Here, recalling these arguments was key in claiming that there is nothing wrong with considering nature and posterity, and taking actions to protect them in decision-making processes, since they are the part of the justice community. However, when the issues of procedural justice or participation are further integrated to the debate, then it would not be wrong to focus, morally, on the issue of representation of nature and posterity in decision-making processes. This constitutes the

backbone of the academic debate concerning the procedural dimensions of ecological justice.[11]

Following this background information, when we distance ourselves from any 'centric' understandings and assume the coexistence of nature and humans, the interaction among them will be seen as normal (see Goodin, 1992 and Dryzek, 2000). However, since nature is not capable of communicating as humans do and posterity consists of individuals who do not exist (see Wissenburg, 2011), the issue of their representation in environmental decision-making processes becomes controversial. Goodin (1992), for instance, presents a lengthy debate, in which he explains the principles of green theory such as sustainability, irreplaceability (of nature) and futurity. All of these issues, for him, enable the direct inclusion of nature and posterity into the environmental decision-making process, due to these values embedded in them. [12] Dryzek (2000), on the other hand, concentrates on the notion of 'environmental communication', where he focusses on nature's ability to communicate with humans. According to Dryzek, it is impossible for nature to perform a verbal communication with humans. However, through signals that must be listened to by humans, such as the ozone hole, climate change and acid rains, he thinks nature communicates with people and urges them to take action to overcome these issues. In other words, Dryzek (2000) implicitly claims that nature actually participates in policy processes through a different type of communication, especially when the consequences of human-induced environmental change are experienced. Although these works are not exclusively about environmental and ecological justice, acting in a way that represents nature and posterity in environmental decision-making processes is believed to provide social and environmental justice (see Schlosberg, 2007).

Goodin and Dryzek attempt to justify the representation of nature and posterity in environmental decision-making. They also implicitly argue that social and environmental justice is likely to be attained when nature and posterity are morally considered as parts of the justice community. Scholars such as Schlosberg (2005) and Eckersley (2005),

[11] Here the word 'hinting' is intentionally used since the majority of literature on green theory reviewed in this research did not particularly analyse the relation of procedural justice and ecological justice. However, in these works, scholars hint the relationship between those, which will be furthered in the following paragraphs.

[12] Here, for the sake of the argument, these principles are considered as the common knowledge and they will not be discussed.

concentrate more on how to achieve this representation. Accordingly, they morally justify the proxy representation of them in environmental decision-making, determining that these entities, which are not able to speak on their behalf, can still be represented by humans in decision-making processes. To broaden this understanding, Eckersley (2005) particularly determines the state as the protector of nature and posterity, which implies the 'proxy representation' of them. She claims that through institutional instruments like constitution, regulations, directives, and environmental bureaucracies, such representation can be achieved, and there is nothing morally wrong about it. Schlosberg (2005) advocates a similar notion, and mainly indicates that the environmental communication, defined by Dryzek, may enable humans to act on nature's behalf in environmental decision-making processes. For him, as well as Goodin (1992), Dryzek (2000) and Eckersley (2005), this proxy-representation can be embodied through the issue of institutional and legal frameworks. These conserve nature and posterity in environmental politics, along with the complaints and requests of nature, which become visible through the unconventional ways of communication introduced above.

In summary, the ideals for justice in environmental processes are aimed to be provided. In terms of procedural environmental justice, these should predominantly focus on the notions of meaningful participation, as well as overcoming legal and administrative barriers with the provision of deliberative models (enabling more transparency, accountability, information sharing and access to legal processes). In addition, these notions should be extended towards the representation of nature and posterity in the same processes. It can be argued that this idealistic formation of environmental policy-processes is environmentally just one when framed through procedural environmental justice.

### 3.4 Conclusion and Identification of Research Gaps

This chapter introduced the conceptual framework of this research, Gordon Walker's (2012) framework for making environmental justice claims. Accordingly, it is advised that an ideal environmental justice analysis should include the components of justice, process and evidence. Firstly, the ideal understanding of environmental justice, justice component of the framework, should be sought. This has been undertaken in this chapter, along with David Schlosberg's (2004, 2007 and 2013) multi-dimensional understanding of environmental justice, in which environmental justice is conceived as justice of distribution, recognition and

participation (procedural justice). Secondly, the broad processes leading to current socio-environmental inequalities should be addressed, with the implementation of an explanatory framework in the process component (Chapter 5). Thirdly, existing socio-environmental (in)equalities should be documented empirically in the evidence component, within the multi-dimensional process proposed by Schlosberg (Chapter 6, 7 and 8). As demonstrated in Figure 3.1, this framework will be applied in this research in the analysis of Turkey's recent small-scale HPPs and their socio-environmental impacts.

This chapter also dealt with the 'justice' component of the framework. By examining the three dimensions of environmental justice, the patterns that can be used to reveal socio-environmental inequalities in the case study areas can be explored. Accordingly, distributive environmental justice, predominantly asking the question of 'who gets what in the environment', targets the (dis)proportionate distribution of environmental benefits and burdens/risks across the society, in addition to vulnerabilities and responsibilities (see Walker, 2009). Recognitional environmental justice, on the other hand, investigates to what extent group differences based on the factors such as race, gender, age, income, culture, religion and ethnicity are recognised in the environmental policy-making. It also investigates to what extent the needs and interests of these groups are represented in these processes. Furthermore, this dimension also focusses on the notions of place stigmatisation and recognition of localities based on place attachments as additional patterns of the dimension. Thirdly, justice as participation (procedural justice) predominantly revolves around the issue of public participation, especially meaningful participation (see Holifield, 2012). It also emphasises numerous legal and administrative issues including, but not limited to, access to information, transparency, accountability, access to legal processes and legislative frameworks in environmental decision-making processes. For each dimension, it is also argued that these patterns can be extended towards the non-human nature and posterity to enhance the ideal environmental justice. In short, this depiction of environmental justice, along with prominent philosophical works, highlights that the ideal environmental justice scenario should consider these dimensions of environmental justice and address their patterns in environmental decision-making processes. It is also essential to keep in mind that while each dimension has been separately evaluated, their inter-connectedness has been implied, which will be better seen in the case analyses.

This review of the conceptual framework of this chapter and Chapter 2's introduction of the main concepts applied in this research indicate three main research gaps. Firstly, although studies in environmental justice frequently refer to (and strongly criticise) modernisation ideology and processes in conceiving socio-environmental (in)justices, modernisation has never been applied as a distinct manifestation of an explanatory framework of socio-environmental inequalities. Chapter 5 aims to highlight the relationship between the environmental justice and modernisation literatures by using modernisation as the prevailing ideology and as an explanatory framework when the roots of socio-environmental inequalities in Turkey's HPP processes are discussed. The case analyses, followed in Chapters 6, 7 and 8, will further help in this conceptualisation, which will manifest modernisation as a distinct explanatory framework in revelation of socio-environmental inequalities in Chapter 9. Through such a distinct manifestation of modernisation, this research brings the modernisation into greater focus within the context of environmental justice. This may be in greater relevance in similar analyses in non-Western contexts.

Secondly, although there have been recent attempts in identifying numerous environmental (in)justices in Turkey, including Islar (2014), Turhan (2014) and numerous individual cases in EJOLT (2015), environmental justice has never been conceptualised for Turkey. As introduced in the introductory chapter, environmental inequalities have gained momentum in recent years, especially when the country has launched ambitious developmental projects in its great leap forward. This issue has been recognised in academic and activist works and environmental justice has started to be uttered by the Turkish academics and activists. However, its conceptualisation remains insufficient. This research, accordingly, aims to address this gap by introducing a thorough empirical analysis on environmental justice in Turkey. It focusses on a relatively unexplored issue area, small-scale hydroelectricity development schemes in its conceptualisation in the Turkish context.

Thirdly, this research recognises the contextual nature of the environmental justice concept, as stated in this chapter and Schlosberg (2007). That is to say, the ideal understanding of environmental justice is not applicable globally, due to numerous factors like differences in socio-economic, demographic, cultural, environmental and political structures, and most importantly due to its Western-centricity as a concept formed and pioneered in the US and UK. This understanding has been highlighted in the political ecology literature by Martinez-

Alier (2002), Heynen and Swyngedouw (2003) and Robbins (2012), and these works recognised the need of formulation of the environmental justice concept applicable to the non-Western contexts. They have not, however, provided a distinct framework for such analyses. Therefore, instead of limiting the analysis to the abovementioned framework (some parts of which can still be relevant in different contexts including this research), this research aims to formulate a distinct framework for environmental justice, revising the abovementioned patterns and adding the new ones. This may eventually provide a more relevant framework for the similar analyses undertaken in non-Western contexts.

In line with this information, Chapter 4 introduces the operationalization of these concepts and frameworks introduced until this point, while also providing the methodology of the research.

# CHAPTER 4: OPERATIONALIZATION OF THE RESEARCH, METHODOLOGY AND METHODS

## 4.1 Introduction

This chapter demonstrates how the conceptual framework of environmental justice is utilised in this research; how it is translated into inquiries, and how those inquiries reflect the framework, that is to say, the operationalization of this research. To this end, this chapter introduces the case studies conducted in this research, while setting out the methodological framework of the research by describing the qualitative methods applied.

The first section gives the ontological and epistemological considerations of the research. The second section briefly introduces the case studies conducted in the Western Mediterranean Province of Turkey, namely, Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay HPP sites. While this section justifies site selections, it also introduces them one by one, through which, it attempts to answer the research questions introduced in Chapter 1. The concepts and frameworks elaborated in Chapter 2 and Chapter 3 are substantiated. The third section firstly discusses how these frameworks are operationalized through case studies, and secondly details the qualitative methods applied in this study. The fourth section clarifies the scope and limitations of this work, while the final section concludes the chapter.

## 4.2 Introducing Qualitative Methodology and Ontological and Epistemological Considerations

This study utilises a **qualitative methodology**. It is defined as 'a way of thinking about and studying social reality' (Strauss and Corbin, 1998: 3). In a broader sense, Strauss and Corbin (1998: 10-11, emphasis added) explains qualitative research as follows:

> 'we mean any type of research that produces findings not arrived at by statistical procedures or other means of quantification. It can refer to research about ***persons' lives, lived experiences, behaviors, emotions, and feelings as well as about organizational functioning, social movements, cultural phenomena, and interactions between nations***...[where] the bulk of the analysis is interpretative…[and aims at] discovering concepts and relationships in raw data, and then organizing these into theoretically explanatory scheme.'

Accordingly, qualitative methodology deals with words rather than quantification, and it is mainly applied in social science research (Sarantakos, 2005 and Bryman, 2008: 366). When examining the purpose and the nature of this research, which falls into the category of social research, qualitative methodology is essential to obtain and organise the data. In this sense, it is qualitative methodology, prioritising the examination of the lived experiences, personal stories and feelings of the people, while also offering ways to 'examine links and connections between objects that cannot speak, yet…bear messages (Prior, 2004: 332)' through discursive approaches (see the next section for details). Since both the issues and the conceptual framework of the research, environmental justice and its components, are directly about people and their relationship with the nature, these issues and concepts can ideally be discovered through this methodology. This point can be further elaborated by bringing the main epistemological and ontological features of the qualitative research into greater focus.

The qualitative methodology applied by this research is predominantly deductive (but also holds inductive elements), is epistemologically interpretative, and is ontologically constructivist, all of which are indicated as the main features of the qualitative methodology (see Sarantakos, 2005 and Bryman, 2008). First of all, this research primarily depends on **deductive reasoning,** which means that the research 'is conducted with reference to…ideas inferred from' theory (Bryman, 2008: 693). The analysis conducted up to Chapter 8 relies on this reasoning, in which the concept of environmental justice (claim-making) is applied to Turkey's HPP policies. However, this research also significantly features **inductive** elements, referring to 'approaches that primarily use detailed readings of raw data to derive concepts, themes, or a model through interpretations made from the raw data by…researcher (Thomas, 2006: 238)'. That is, this research does not only test if the data is consistent with prior assumptions. It also investigates the issues experienced in particular case areas by focussing on the concept of environmental justice, especially in Chapter 9. Since the concept itself is a contested one, meaning that it does not have a fixed model of analysis (see Chapter 3), this research eventually forms its peculiar understanding of environmental justice as a result of peculiar socio-spatial and historical processes unpacked through qualitative methods. For example, the major instance of this inductive approach can be seen in the Chapter 9, on recognitional environmental justice. Here the prevailing directions of environmental justice analyses centred on the discrimination of people based on race and ethnicity are not followed in this research. Instead, new factors of analysis are detected while

interpreting the raw data. Thus, this example and others (see Chapters 6, 7 and 8) show that this research has an inductive element, which enriches the existing concepts rather than simply testing them.

Related to this feature, this research is **epistemologically interpretative**, meaning that 'the stress [of this research] is on the understanding of the social world through an examination of the interpretation of that world by its participants (Bryman, 2008: 366)'. On the other hand, it is **ontologically constructionist**, referring to 'the contingent nature of knowledge and reality, arguing that there is no ultimate reality…[where] the social world exists merely in the eye of the beholder, since individuals are free to make their own attributions (Barbour, 2014: 33)'. In other words, the constructionist point of view is strongly associated with the cultures and linguistic constructs hidden in people's knowledge and perceptions of the physical world (Patton, 2002). These epistemological and ontological approaches acknowledge the subjectivity of knowledge and its sources. In other words, the pursuit of these approaches enables a researcher to question the knowledge while also enabling the use of discursive analyses. As a result, knowledge can be formed and 'truth' is reflected (see Prior, 1997). These bases of qualitative methodology are important for this research since they recognise the subjective nature of the concept of environmental justice. They permit the construction of a contextual environmental justice analysis, focussed on the HPP-related issues experienced in Turkey. They are also key in data gathering and analysis processes, because the data relies on people, their own experiences, and perceptions regarding the HPP development. These provide the bases to understand the recent socio-ecological issues regarding HPP development in case areas, which cannot be fully grasped with positivist approaches that disregard the social contexts (see Bashkar, 1989). By doing so, the 'reality', which is concealed in the words and experiences of the people and different social and cultural contexts, can be discovered, through interpreting these different experiences and perceptions. This is operationalized with the concept of environmental justice.

### 4.3 Research Technique: Case Studies and Case Selections

The usage of multiple case studies allows one to 'understand complex social phenomena (Yin, 1994: 14)' while also allowing the investigation of 'a contemporary phenomenon [HPP development] within its real-life context; when the boundaries between phenomenon and context are not clearly evident (Yin, 1994: 23)'. This technique enhances the empirical side of the research. The usage of multiple case studies also makes the application of **comparative strategy** possible. According to Bryman (2008: 60), '[b]y comparing two or more cases, the researcher is in a better position to establish circumstances in which a theory will or will not hold'. In other words, having multiple cases and using comparative research strategy will provide 'a basis for making statements about empirical regularities and for evaluating and interpreting cases relative to substantive and theoretical criteria (Ragin, 1987:1)' as implied throughout this chapter.

The main reasoning followed in the case selection process is that cases should represent different, but most frequently seen public reactions, which also mirror frequently seen outcomes experienced within the Turkey's HPP processes to attain generalizable environmental justice claims. As a result of the review of available documents, publications and media coverage, it is identified that the most frequently seen public reactions in Turkish HPP process are:

1- Public consent for the HPP construction (with low degree of opposition or no opposition and leading to the construction of the HPP),
2- Pre-emptive public opposition prior to the start of HPP construction, leading to the withdrawal of the HPP company,
3- Public opposition subsequent to the start of HPP construction, which frequently involves court processes which eventually stop the HPP construction,
4- Massive public opposition to the HPP, which has later become an emblemic case.

The four case studies selected for this research represents these four most frequently seen public reactions against the HPPs as well as indicating the frequently seen outcomes of the HPP processes. For instance, the construction that started on the Kargı Stream, one of the five planned HPPs on this creek, represents a case where locals opposed the construction and pursued legal action against the company in question to secure their interests, which stopped

the construction process. The cases on Eşen Stream also offer a variety of responses from locals and display different outcomes of the HPP processes. For example, the Söğütlüdere case, where the HPP has been constructed and has been in operation next to the Söğütlüdere Village since January 2014, embodies a case of local consent, rather than an opposition. In addition, two projects that were attempted to be constructed on the Eşen Stream (generalised as Saklıkent case) offer interesting cases, since the projects stopped before the construction started due to public opposition and subsequent legal processes initiated by the locals, who pre-emptively took action against a potential construction. In addition, when travelling towards the Western Mediterranean Province to conduct research on HPPs, it is impossible to neglect Yuvarlakçay, which is located 70 kilometres away from Fethiye, within the administrative boundaries of the county of Köyceğiz of Muğla. The Yuvarlakçay case is a milestone in Turkey's HPP history, since it represents the first mobilised public opposition, which was widely publicised in the national media in 2009 and 2010. This resulted in the withdrawal of the construction company after almost a year of active resistance by the locals, who camped non-stop at the construction site for 10 months (Çobanoğlu et al, 2014). As will be shown, this represents the first HPP case in Turkey, where the company withdrew itself from an HPP process due to the public opposition.

In summary, these four case study sites represent the most frequently seen public reactions within Turkey's HPP process, which are public consent (Söğütlüdere HPP), pre-emptive public opposition leading to company's withdrawal (Saklıkent HPP), legal struggles ending the process (Kargı-Yanıklar HPP) and a landmark case of public resistance (Yuvarlakçay HPP). It is important to represent those different aspects to strengthen the environmental justice claim, which is the ultimate aim of this research. Related to this point, the other reason for picking these cases is that all of these HPP processes refer to completed processes. This is important as it permits the observation of social and environmental impacts of these processes. It also makes people more comfortable in discussing these issues, since the oppositions were calmed and relevant processes were completed.

Out of approximately 2000 potential HPP cases in Turkey (see Chapter 1), the case areas for this study are chosen from the Western Mediterranean Province, specifically from Fethiye. The main reason that this research is based on the cases from Western Mediterranean Province is that this region has not been systematically brought into greater focus. This is

true despite the fact that region hosts hundreds of (potential) HPP projects due to its geographic advantages, ranking the region just below the Black Sea Province (TMMOB, 2011). Cases of the Black Sea Province have been widely publicised in media and analysed by the academics elsewhere (see Islar 2012a, Erensu, 2013 and Eryılmaz, 2012). The Mediterranean Basin is shown as a part of the IUCN Biodiversity hotspots, most of which are subjected to particular legal conservation schemes like national park (Saklıkent), habitats of endemic and endangered species (Kargı-Yanıklar) and Special Environmental Protection Area (*Özel Çevre Koruma Bölgeleri*, ÖÇK in Turkish acronym hereafter) regions (parts of Saklıkent, Kargı-Yanıklar basin and Yuvarlakçay basin, created under the 1976 Barcelona Convention (see Chapter 5 for details)). These locations are widely considered as touristic areas and fertile agricultural lands, where water's key role in socio-economic and ecological processes and impacts of HPP constructions on environment and society can clearly be observed. This provides a good opportunity to analyse cases with an environmental justice perspective. As an important field and niche area, this region particularly draws attention during the case selection process.

Logistic reasons were also essential in the process of case selection. Keeping in mind the time constraints and financial limitations of this research, three issues were prioritised: accessibility (to sites due to available climatic and topographic conditions), proximity (of these differently formed public reactions, which are mostly two hours away from each other by car) and approachability (to locals, due to their cultures) to use time and money effectively during field visits. These sites were quite accessible by personal cars and even public transportation, which eased the frequent travels between these sites during the field study. This would not be possible in the other parts of Turkey, especially the Eastern Black Sea Province, due to its scattered settlements. Furthermore, all of these sites were close to each other, and to the town centres of Fethiye and Göcek, making it easier to find accommodation and travel in between the sites repeatedly. Finally, the locals of this region and case areas have a reputation for being approachable, due to their culture and open-mindedness. They are used to dealing with domestic and foreign tourists, making them comfortable in discussing such issues. The next sections briefly introduce the case study areas.

### 4.3.1. Introducing the Case Study Areas: Fethiye

As pointed in the previous section, four HPP sites from the Western Mediterranean Province (see Figure 4.1) were selected as the case studies of this research. Below these four sites, Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay are briefly introduced by informing on the general features of the region (the Western Mediterranean Province based on Fethiye, which emerges as the main administrative centre for these areas). The demographic, climatic and hydrological features, covering introductory information about these case study areas, are outlined, followed by brief introductions of each of the sites.

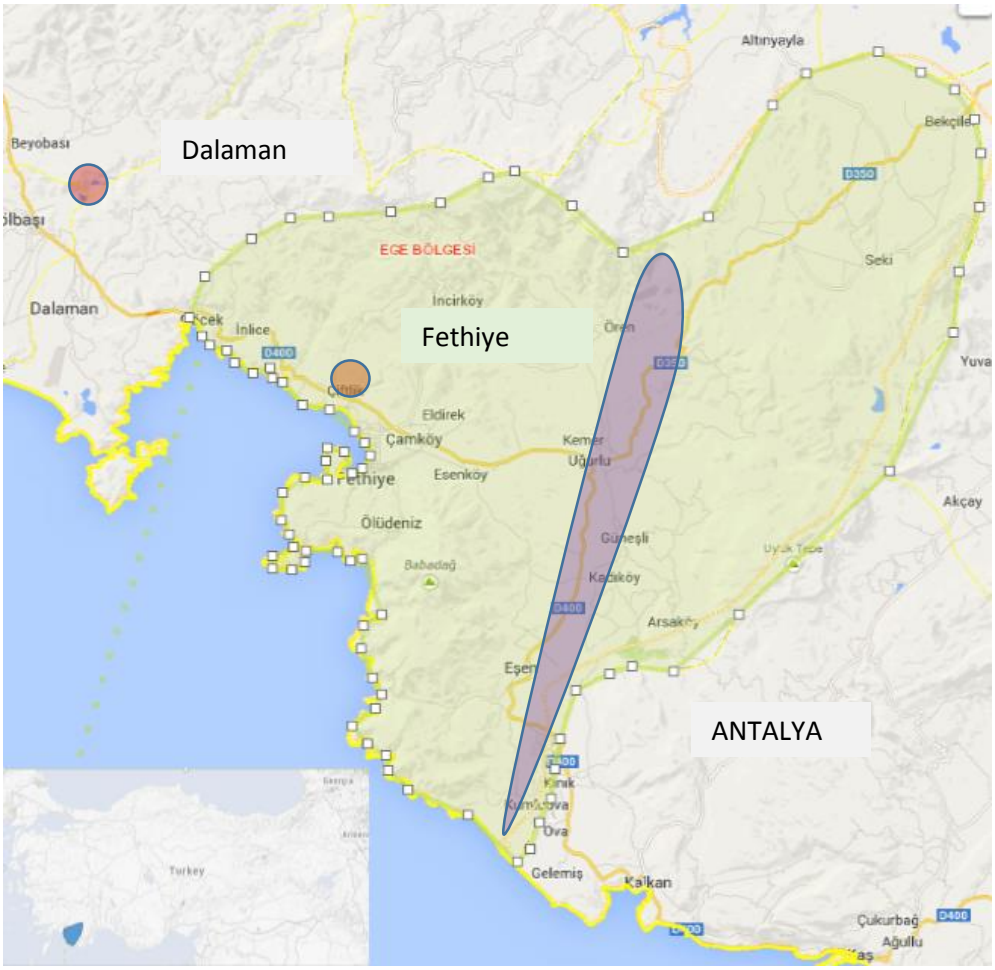


**Figure 4.1:** Location of Western Mediterranean Province within Turkey. The red shaded area on the map shows the case of Yuvarlakçay, the brown one refers to the case of Kargı Stream, while the purple ones refers to the ones on Eşen Stream, on which the Saklıkent and Söğütlüdere HPPs are planned (prepared by using Ministry of Forestry and Water Affair's GIS database (2014)).

#### 4.3.1.1. Location and Population

Fethiye is a county of the city of Muğla, located in the southwest corner of Turkey. Although Muğla is administratively included in the Aegean Province of the country, Fethiye is located at the border of the Mediterranean and Aegean provinces. [13] It is the largest county of Muğla in terms of population. Its population is given as 140,509 by the County Governorship (Uğur et al, 2013). According to the same source, 62% of the total population live in urban areas, while 38% reside in rural parts.

#### 4.3.1.2. Geography and Climate

This region is under the influence of a Mediterranean climate, which is also called as dry-summer subtropical climate. Summers are hot with very little precipitation, while winters are warm. It precipitates in spring, autumn and, mainly, winter. The average winter temperature is shown as 9.8 $^{o}$C, while it is indicated as 27.1 $^{o}$C for summers (MGM, 2014). Furthermore, annual average precipitation is estimated at 835.3 kg/m$^2$ (FCCI, 2013).

Due to the main feature of the Aegean coasts, related to excessive tectonic movements around the Aegean Sea, this province has numerous bays, gulfs, sea-rocks and small islands along its coast. The tectonic movement also makes the region mountainous. The region features Mediterranean vegetation, which is known as maquis shrubland, consisting of plants that are highly adapted to hot and drought summers and wet winters. Moreover, the region is forested. In the coastal areas, shrublands, olive groves, citrus trees and oak groves can be frequently seen.

The region is also important in terms of biological diversity. The entire province is a part of one of the IUCN Biodiversity Hotspots, the Mediterranean Basin. Hence, it hosts endemic species, most notably, oriental sweetgum (*Liquidambar orientalis*), which is used in the cosmetic and medicine sectors, the Mediterranean seal (*Monachus monachus*) and sea turtles (*Caretta caretta*), which are the symbols of nature conservation of Turkey (Eken et al (eds.), 2006).

[13] Turkey is administratively divided into seven provinces as Black Sea, Marmara, Aegean, Mediterranean, Central Anatolia, East Anatolia and Southeast Anatolia.

#### 4.3.1.3 Hydrology of the Streams of the Research: Eşen, Kargı and Yuvarlakçay Streams

The Eşen and Kargı streams are the main rivers of Fethiye. The Eşen is the longest stream in Fethiye; it is 146 km long (Ministry of Forestry and Water Affairs, 2013). Its catchment area is approximately 3185.58 $km^2$ as calculated through the Ministry of Forestry and Water Affairs' GIS program (2014; see Figure 4.2 below). The Saklıkent and Söğütlüdere HPPs are planned on this stream.


**Figure 4.2:** Catchment area of the Eşen Stream (prepared by using Ministry of Forestry and Water Affair's GIS database (2014)).

The Eşen's river surface area is measured as 600 hectares (Uğur et al, 2013). The same document gives the monthly average flow of the stream as 14.9 $m^3/s$, while minimum flow is determined as 1.65 $m^3/s$ (in September) and maximum is 271 $m^3/s$ (February-March) (see also DSİ, 2014). This river has been utilised for irrigation, drinking water provision and energy generation. In addition it supports touristic activities, like rafting in the Saklıkent

Valley (which is located within the catchment area and has ‘national park’ status), and trout farming (Uğur et al, 2013). [14]

In terms of aquatic biodiversity, Onaran, Özdemir and Yılmaz (2006:40) identify that the stream can be considered as ‘rich’ in terms of fish biodiversity. It hosts 10 species and three sub-species of fish ‘with various phsyo-chemical and ecological features’ (Onaran, Özdemir and Yılmaz, 2006:40). Accordingly, they list the European eel (*Anguilla anguilla*), Mediterranean trout (*Salmo trutta macrostigma*), freshwater blenny (*Blennius fluviatilis*), crucian carp (*Carassius carassius*), European chub (*Leuciscus cephalus*), Dnieper chub (*Petroleuciscus barysthenicus*), Aegean scraper (*Capoeta capoeta bergamae*, native to Turkey and considered as near-threatened in IUCN Red List), barbel (*Barbus plebejus escherichi*), big-scale sand smelt (*Atherina boyeri*), flathead mullet (*Mugil cephalus*), leaping mullet (*Liza saliens*), grey mullet (*Mugil ramada*) and boxlip mullet (*Oedulechilus labea*).

The Kargı Stream is the second longest stream of Fethiye. Its length is estimated as 20 km (Demir, 2011). Its catchment area is approximately 406.41 km$^2$ as measured through the Ministry of Forestry and Water Affairs’ GIS program (2014; see Figure 4.3 below). The Kargı-Yanıklar HPP, analysed in this research, is planned on this stream.


**Figure 4.3:** Catchment area of the Kargı Stream (prepared by using the Ministry of Forestry and Water Affair’s GIS database (2014).

[14] As indicated before, in trout farming, Fethiye is considered as a leading region in Turkey. According to FCCI Report (2013), there are 66 trout farms in the county. My observation can confirm that most of these facilities locate in the Eşen Basin.

The monthly average flow of the Kargı Stream is 4.42 $m^3/s$, while its maximum flow is 7.5 $m^3/s$ (February) and its minimum is shown as 2.6 $m^3/s$ (October), according to data derived from State Hydraulic Works' database (2012). Irrigation and trout farming are reported as the main uses of the stream (Uğur et al, 2013).

Due to seasonal differences in water availability, and the shallowness of the creek, aquatic biodiversity is quite limited in the river ecosystem. However, in the catchment area, forests and plants belonging to the maquis ecosystem draw attention when mentioning biodiversity issues. As indicated above, forests of red pine, black pine and oriental sweetgum can be frequently seen in the catchment area, the availability of which is supported by this creek. The existence of oriental sweetgum trees (*Liquidambar orientalis*) makes the creek essential for the maintenance of this peculiar ecosystem, since they demand high phreatic groundwater to grow, which is provided by Kargı Stream. [15]

Yuvarlakçay Stream flows for 21 kilometres. Its catchment area can be calculated as around 62.53 $km^2$ using the Ministry of Forestry and Water Affairs' GIS program (2014; see Figure 4.4 below). The Yuvarlakçay HPP is planned to be constructed on this stream.


**Figure 4.4:** Catchment area of the Yuvarlakçay Stream (prepared using the Ministry of Forestry and Water Affair's GIS database (2014).

[15] Due to ethical concerns, the document cited in this paragraph is not revealed.

The DSİ does not have annual measurements for recent years (the last period covered was between 1962 and 1967). According to its database, and the General Assembly of Muğla Municipality's decision, the average monthly flow of the brook is 3.5 m3/s. This peaked in January-February at 5 $m^3$/s (see the copy of the official document at Çobanoğlu et al, 2014). The stream is mainly utilised by the locals of Pınarköy for garden irrigation and domestic usage. There are also eight trout restaurants, along with the stream. Other surrounding towns and villages, including Köyceğiz and Dalyan, also use this stream for drinking water. Furthermore, the stream is vitally important in supporting local nature, which attracts tourists to the region.

Çobanoğlu et al (2014) indicate that at the source point, the water temperature of Yuvarlakçay is between 13 and 15 $^oC$, and that it is clear and drinkable. However, the water quality reportedly decreases due to the existence of a trout farm, disposing wastes into the stream, and domestic disposals. The fish detected in the stream include European eel (*Anguilla anguilla*), freshwater blenny (*Blennius fluviatilis*), European chub (*Leuciscus cephalus*), Aegean scraper (*Capoeta capoeta bergamae*), barbel (*Barbus plebejus escherichi*), big-scale sand smelt (*Atherina boyeri*), flathead mullet (*Mugil cephalus*), an endangered cyprinid (*Lodigerscopyris ghigii ghigii*), ray-finned fish, native to Turkey, (*Cobitis vardarensis kurui*), mosquitofish (*Gambusia affinis*), striped tilapia (*Tilapia zilli*) and Caucasian dwarf goby (*Knipowithschia caucasica*) (Balık et al, 2005). Otters (*Lutra lutra*) are also seen through the stream as a part of the aquatic biodiversity, while the stream basin is also important for the amphibians and salamanders (Çobanoğlu et al, 2014). For example, the Land salamander (*Lyciasalamandra-fazilae*) is endemic to the basin and Dalyan (neighbouring basin), which is also within the borders of Special Environmental Protection Area.

### 4.3.2. General Features of the Study Sites

#### 4.3.2.1. Saklıkent HPP site

As indicated above, the Saklıkent HPP is planned for construction on the Eşen Stream. Along with the stream there are many small villages, including Demirler, Eşen, Çukurincir, Palamut and Aklar, representing the closest settlements to this HPP. These were visited during the field study. The main characteristic of these villages, and this site in general, is that the basin

is located just next to the Saklıkent National Park. Demir (2011) states that the construction site was actually once within the borders of the national park, right before the park's borders were narrowed by the Cabinet decision in 2009. This was before the construction process started.

The economic activities of the locals living in those areas are agriculture and tourism. Agriculture in particular looms large in people's livelihoods, as the region has a reputation to have fertile agricultural lands. Although there are few large-scale industrial agriculture facilities in the basin, the locals of the abovementioned villages earn their living from subsistence agriculture. Their main crops are seasonal fruits and vegetables. Related to this, greenhouse agriculture and fish farming are also among the main economic activities of the locals. Given that the Saklıkent Valley and its basin is one of the most popular tourist destinations of Turkey mainly due to its natural beauty and ancient Greek remains (see Figure 4.5), small-scale touristic businesses such as small hotels, restaurants, souvenir shops, rafting, mud bath facilities and local tourist guiding are also important in locals' economic options.

**Figure 4.5:** Greek remains around the Saklıkent HPP site (author's own photo).

In December 2008 two HPPs (representing one case study) were licensed to the same company for construction in this basin (Demir, 2011). These HPPs were expected to generate 9.67 of MW electricity. They would also include a reservoir, covering 230.000 $m^2$ area within the basin. Local communities have not welcomed these HPPs however, and they organised a

series of opposition movements and initiated court cases between 2010 and 2013. Due to these public oppositions, the construction company inquired as to the possibility of withdrawal by applying to EPDK (Electricity Market Regulatory Authority, Turkish acronym) on April, 30, 2013. This was approved by EPDK on May 26, 2013, meaning that the company withdrew itself from the process (*Evrensel*, 2013).

#### 4.3.2.2 Söğütlüdere HPP

The Söğütlüdere HPP is also planned on the one of the tributaries of Eşen Stream, locating at its upstream, called Akçay. There are two main settlements around the HPP site, which are the Söğütlüdere Village, located right next to the HPP site, and is the main settlement to be affected by the HPP, and the Çayan Village, which is relatively distant from the site. The Söğütlüdere Village is relatively distant from the administrative centres, compared to the other cases analysed in this research, and it is a scattered settlement due to the steep and mountainous characteristics of the region. Unlike the Saklıkent case, this region is not associated with peculiar natures, while there are limited olive groves around the village.

The economic activities of the village depend on subsistence agriculture of seasonal vegetables and fruits, and animal husbandry. Fish-farms located around the village also provide limited employment for the local community. However, agriculture can only be practised on very limited lands near the lower village, leaving the rest of the population at the upper village, which is the main populated area of the village, to practise gardening. The village also does not have as developed an infrastructure as the ones mentioned in the Saklıkent case, and it does not have any additional livelihoods like tourism to support the locals.

Demir (2011) reported that the Söğütlüdere HPP case dates back to 2004, when a company was issued three licences for HPP constructions. Between 2004 and 2007, despite the existence of these licences, there was no attempt from the company to carry out any construction. In 2007, this company was bought by a larger, and the licences were passed in title to the new company, which is the same one that features in the Yuvarlakçay case. The proposed site of one of these HPPs was in the lower parts of the Söğütlüdere Village, close to the agricultural lands. This proposal was met with the frustration by the locals. Later, by January 2010, two existing licences were combined and a new HPP, with 6.95 MW capacity,

was proposed on a more remote area to avoid public opposition. The construction then began after a settlement was reached between the company and locals, and this HPP has been in operation since January 2014, see Figure 4.6 below.

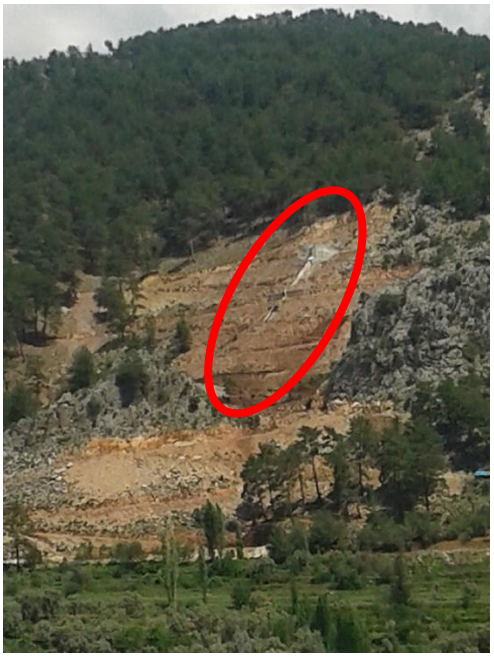

**Figure 4.6:** The Söğütlüdere HPP is shown by the circled area (author's own photo).

#### 4.3.2.3. Kargı-Yanıklar HPP

This HPP is planned on the Kargı Stream. There are three settlements associated with this case, which are the Karacaören Village, at the source of the stream and hard to access due to steep and mountainous terrain, the Kargı Village and the Yanıklar Village. The latter two villages were visited as a part of the fieldwork. As indicated above, these villages and the basin in general are known as being the reproduction corridor of an endangered and endemic species, *Liquidambar orientalis* (see Figure 4.7) and the majority of the basin is part of the Special Environmental Protection Area.

**Figure 4.7:** *Liquidambar orientalis* at the Kargı Basin (author's own photo).

The economic activities of the Kargı and Yanıklar villages are similar to the ones listed in the Saklıkent case. Accordingly, agriculture and tourism are the main economic activities of the local communities. Subsistence agriculture (of seasonal vegetables and fruits) and fish farms are the main sectors that provide employment for local communities. The locals of Karacaören Village, on the other hand, are limited in their agriculture due to the topographic relief. Both in the Kargı and Yanıklar Villages, which are also closer to the Aegean Coasts, tourism facilities are situated next to the Kargı Stream. They range from small-scale hotels, boutique hotels and large five-star holiday resorts, to ecotourism centres. All of these facilities provide employment opportunities for the local communities.

Demir (2011) explains that the HPP that was attempted to be constructed on the Kargı Stream has been discussed since 2003. In 2007, there was an initiative of construction around the Yanıklar Village, which was opposed by the locals. The next one was in 2009, which was proposed to the upstream of the stream, near the Karacaören Village. The company was licensed for the HPP construction, which was planned a 1.7 MW facility on October 2009. The local people learned about this process when the zoning map was announced on May 2010, and immediately after this, they voiced their worries about the construction and initiated a series of legal cases. As a result of one of these cases, the court stopped the construction on 31 October 2011, mainly due to the existence of endemic species at the construction site.

#### 4.3.2.4. Yuvarlakçay HPP

The Yuvarlakçay HPP is planned on Yuvarlakçay Stream. The closest settlement to the construction site is Pınarköy, which is located 68-kilometres-west of Fethiye. Pınarköy has scattered settlements due to the mountainous topography of the village. It is a forest village, in which the most of the dwellings and agricultural lands are located in forest, creating several administrative problems for the locals (see Chapters 6, 7 and 8). The region, including the construction site, is part of a Special Environmental Protection Area (Çobanoğlu et al, 2014).

The main economic activities of the village are agriculture and animal husbandry. In addition to traditional ways of agriculture, greenhouses have recently spread in the village. The main agricultural products of the village are seasonal vegetables and fruits. Furthermore, along with Yuvarlakçay, there are trout restaurants, which attract tourists to the region. Due to the impressive landscape and natural beauties surrounding the village, the region is also popular for outdoor sports and nature tourism (see Figure 4.8).

**Figure 4.8:** The view of Yuvarlakçay basin from the way of Pınarköy (author's own photo).

As noted above, the HPP process of Yuvarlakçay can be deemed as an exceptional case due to the level of public opposition, the nationwide publicity of the case and the legal cases involved. These resulted in the outlawing of the HPP construction, one of the first cases

cancelled due to the public opposition. The main features of all case areas can be seen in the Table 4.9 below:

| | **HPP Status** | **Level of Opposition** | **Environmental Status** | **General Features** |
|---|---|---|---|---|
| **Saklıkent** | Not constructed due to public opposition | High | The basin is very close to and previously within the borders of Saklıkent National Park | -Highly touristic basin<br>-Fertile agriculture lands and fish farming<br>-Natural beauty and historical remains |
| **Söğütlüdere** | In operation since January 2014 | Initially moderate, but appeased in the process | Steep, mountainous lands | -Relatively worse-off population<br>-Limited agricultural lands<br>-Limited social opportunities and infrastructure |
| **Kargı-Yanıklar** | Court stopped the construction in 2011 | High | Reproduction corridor of an endemic species, *Liquidambar orientalis* and the basin is part of Special Environment Protection Area | -Tourist destination<br>-Fertile agricultural lands<br>-Relatively larger settlements with more socio-economic opportunities |
| **Yuvarlakçay** | Company withdrawal due to public opposition in 2010 | Very high | Special Environment Protection Area | -Touristic place<br>-Subsistence agriculture<br>-The closest settlement is a forest village |

**Figure 4.9:** The summary of case study areas.

## 4.4 Substantiating the Conceptual Framework and Introducing the Methods

The case studies enable the operationalization of the concepts and conceptual framework introduced earlier; Turkey's modernisation process and making of environmental justice claims. Within this context, nature/society relations emerge as the focal point of the analysis. Each case study area can be considered as a peculiar socio-environmental transformation (see Chapter 2), which has been produced as a result of complex relations and processes. These transformations are caused by the (potential) HPP constructions, and are reflected through the subsequent public reaction (opposition or consent). In other words, the deconstruction of these public reactions against HPPs at the case study areas substantiates nature/society relations and other normative concepts used in this research, including modernisation and environmental justice, while also demonstrating local manifestations of the state policies. By focussing on these case studies, the study aims to identify the infiltration of the modernist ideologies into the local HPP processes in Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay. This is achieved by exploring state policies, and by examining the conduct of the HPP processes there (Chapter 5). The modernist development agenda of Turkey is particularly investigated, and its implications are considered in terms of environmental justice.

Building on this disentanglement of socio-environmental transformations (through deconstructing public reactions and policy processes), the socio-environmental (in)equalities experienced at the local level are revealed. This empirically informs the concept of environmental justice. From the narratives of locals, technocrats and experts, their main motivations in the formation of their reactions against HPPs can be discovered. These also document important issues and incidents causing socio-environmental (in)equalities, while also demonstrating their understanding of environmental justice. That is to say, the intentions are: to understand what sort of impacts the HPPs (would) have in the case study areas; reveal to what extent locals and local peculiarities are taken into consideration in these processes; and understand whether people had the opportunity to participate in these HPP processes through such a deconstruction. These reflections reveal whether these HPP processes are perceived as just or not. They also clearly provide insights on the conceptual framework and the three dimensions of environmental justice, introduced in Chapter 3: distribution, recognition and participation.

Within this context, the focus on the distributive aspects of environmental justice is embodied through the examination of the tangible socio-environmental impacts of HPPs at these localities. Investigations are carried out to uncover people's livelihoods, the social and economic conditions they experience, their adaptation to the (potential) changes, water use and land use practices, water allocation and access to water. These investigations also examine how these conditions would change through the HPP constructions and associated processes, including expropriation and electricity generation. These investigations, carried out through the disentanglement of public reactions against HPPs through local's narratives and personal observations, give insights on 'who gets what in the environment' dimension and shed light on the (un)evenness of distributions among the actors. Within the context introduced in Chapter 3, the operationalization of this dimension of environmental justice is briefly depicted in Figure 4.10.

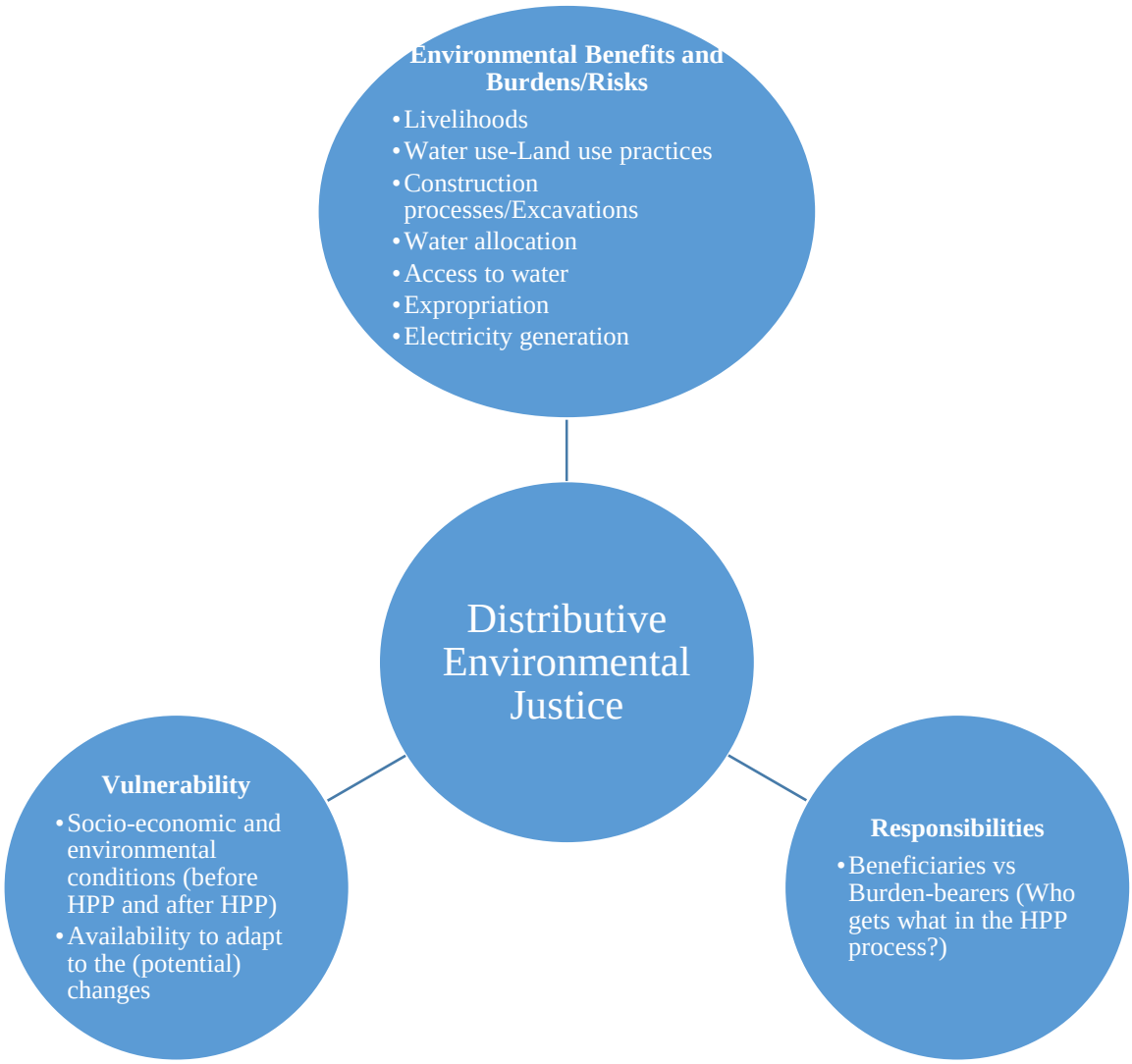

**Figure 4.10:** Patterns of distributive environmental justice and issues/incidents considered when operationalizing the patterns.

Similar steps are followed concerning the subject of environmental justice as recognition. Recognitional environmental justice is investigated through the examination of socio-cultural and environmental peculiarities, based on the factors such as age, gender, wealth, ethnicity, religion, culture and regional-environmental characteristics, and to what extent these are integrated into the policy process. To clarify these aspects, locals' perceptions on the streams, water, living spaces and their villages are examined to uncover local peculiarities, positivities and negativities. These perceptions, and their role in forming local reactions against HPPs, are questioned. In addition, the legal frameworks of environmental protection and the HPP process are analysed, and an assessment of their implementation is used to indicate to what extent nature is recognised in the policy processes. When these points are clarified, through questioning to what extent locals and nature are taken into consideration in the HPP processes (through deconstructing public reactions), recognitional aspects of environmental justice, as elaborated in detail in Chapter 3, are solidified. A depiction of this is seen in Figure 4.11.

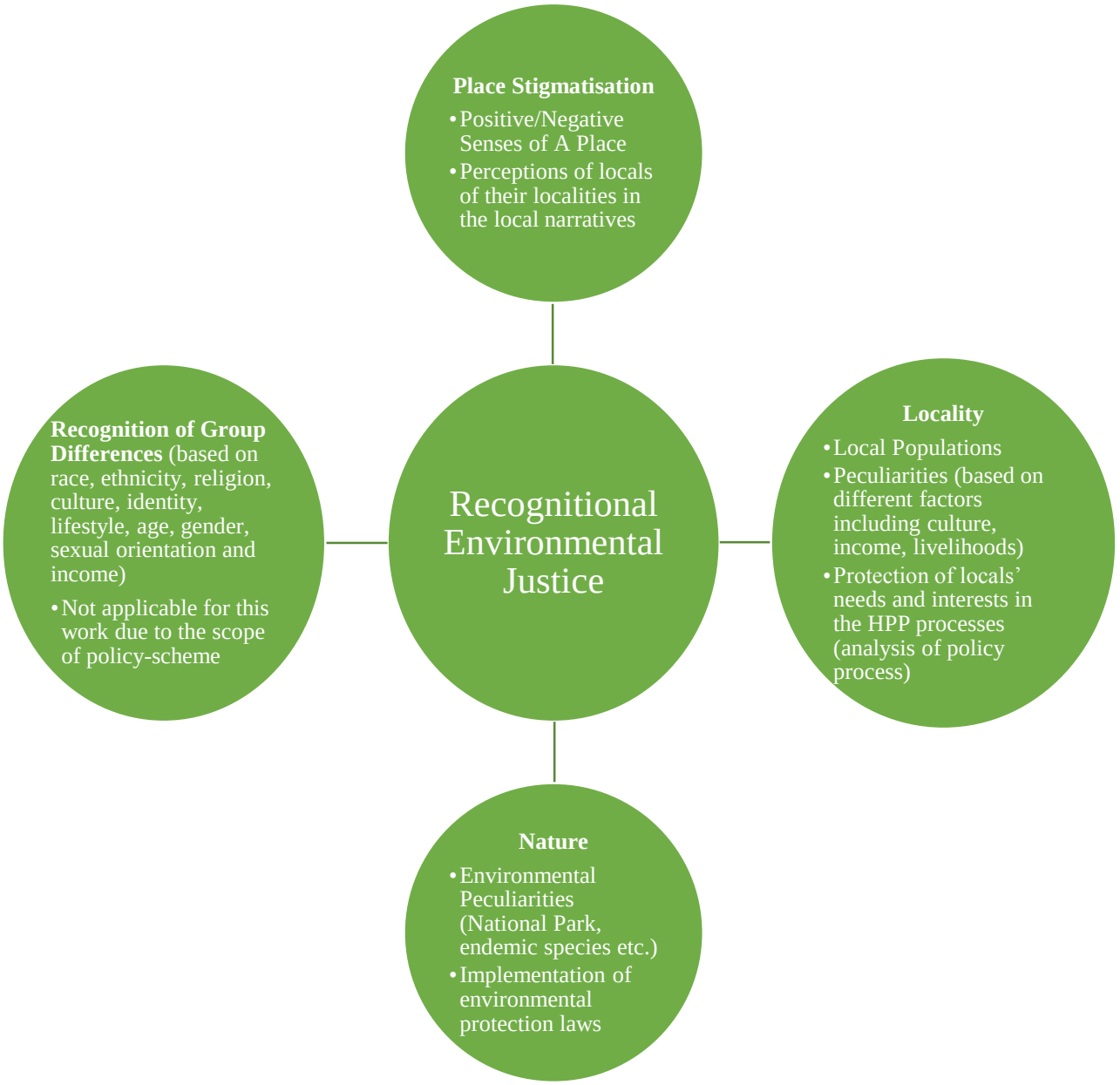


**Figure 4.11:** Patterns of recognitional environmental justice and issues/incidents considered when operationalizing the patterns.

Environmental justice as participation (procedural justice) is depicted through the investigation of how people participate in decision-making processes. It is frequently associated with meaningful participation. By aiming to specifically listening to personal narratives regarding the operation of HPP processes in case study areas (which gives the

historical development of these processes for the particular areas), the degree of locals' participation to the HPP processes is aimed to be revealed. In addition, concentration on the legal processes such as EIA and court cases, and administrative processes deploys local (in)equalities and further substantiates the procedural dimensions of environmental justice.


**Figure 4.12:** Patterns of meaningful participation and issues/incidents considered when operationalizing the patterns.

The questions, issues and incidents formed around these parameters necessitate a mixed methods approach of qualitative, desktop and primary sources and a historical perspective.

This will allow the entire water policy process of Turkey, reflected in local HPP cases, to be understood, forming a well-equipped environmental justice claim by the end of this research.

These methods are divided as **desktop study** (pre- and post-field visit desktop studies, containing literature review, document analysis, discourse analysis and mass media/social media analysis) and **field study** (interviews, group interviews and observation). First of all, depending on (but not limited to) existing literature on environmental justice, a set of criteria are compiled in the pre-field visit desktop study. These criteria (along with an initial issue list) are mainly discovered by reviewing academic sources on environmental justice and analysing the available mass media/social media sources (see Figures 4.10, 4.11 and 4.12). Field visits and interview questions are then planned in accordance with these pre-set criteria, which are intended to explore the recent issues through interviews, group interviews and observation. The data obtained during the field study are further analysed through methods similar to those used in the pre-field visit desktop study. All of this analysis ultimately inform the environmental justice related issues within the context of its trivalent understanding, while also demonstrating the role of Turkey's modernist agenda in such local HPP processes. Thus, qualitative methods strengthened the understanding of the entire HPP process of Turkey.

Therefore, this research process is divided into two as desktop study and field study. Desktop study consists of two phases, **pre-field visit desktop study** and **post-field visit desktop study**. These include methods of document analysis, discourse analysis and social media/mass media analysis. Interviews, group interviews and observations are then applied during **field visits**. The rest of this section details these qualitative methods and shows how they are used to solidify the conceptual framework of this research.

### 4.4.1. Pre-Field Visit and Post-Field Visit Desktop Study

Before the field study, an extensive literature review was conducted to establish the conceptual framework of this research and provide a general overview of Turkey's water policies. In addition to this, prior to the field visits, media coverage such as newspapers, online platforms and documentaries, available official documents such as ministerial documents and DSİ reports and non-official documents such as NGO reports and HPP project files (regarding the ones on case areas) were extensively reviewed to reveal Turkey's HPP

processes. This also sets the scene for the case study analyses. Moreover, this was accompanied by analyses of the discourses applied in these works, demonstrating the perceptions of different actors on water, and how they mediated water in the policy process. As implied before, this initial extensive desktop study significantly also enabled the identification of potential issues and incidents that may arise in the field studies within the context of trivalent environmental justice understanding (see Figure 4.10, 4.11 and 4.12). This process eventually solidified the concepts used in this research through the case analyses.

The desktop study conducted before the field study was not sufficient to understand the whole HPP process of Turkey, especially because of the lack of data on the local socio-ecological implications of HPPs. To overcome this insufficiency, field visits, consisting of individual interviews, group interviews and observations, were organised to Fethiye, Yuvarlakçay, Dalyan, Ankara and İstanbul to collect further data about the HPP process of Turkey. Thus, subsequent to field visits, this data was analysed through additional desktop study, applying the qualitative methods of ***document analysis***, ***mass media/social media analysis*** and ***discourse analysis***.

#### 4.4.1.1.Document Analysis

In addition to academic publications, documents provide relevant information to research, especially to the ones dealing with case studies, as Yin (1994) indicates. Bryman (2008: 515) refers to documents as materials that 'can be read; have not been produced specifically for the purpose of social research; are preserved so that they become available for analysis; and are relevant to the concerns of the social researcher'. Official documents, NGO reports, (in)formal studies and evaluations and visual sources such as photographs all fall under this category (Yin, 1994: 81; Bryman, 2008). The analysis of the information contained within these sources is useful to support and test the findings derived through fieldwork, all of which help to shape the case study analyses (Yin, 1994). Document analysis, as part of both pre- and post-field visit desktop study, is used as a qualitative method in this research.

The statistical information on case study areas and HPPs, the general scope of the HPP policies, the relevant legislative framework and the historical process of Turkey's hydropower policies, are essential to support this research and give background information

regarding the HPP process in Turkey. This information is obtained essentially through official (governmental) and organisational documents. For example, statistics and official information provided by TurkStat, DSİ, DPT, relevant legislations and parliamentary sources on the HPP issues were frequently utilised when framing the background of this study and explaining the HPP process in a broader context prior to the field visit. Furthermore, municipal documents (administrative documents or documents related to the local sites) are also vital to illustrate the issues directly affecting the case study areas. In addition, copies of official documents such as agreements between companies and DSİ, EIA reports, petitions and court decisions regarding the constructions, most of which were provided during the field visit, are also key sources to understand the distributive, recognitional and procedural aspects of HPPs at the case study areas. These disclosed and formalised the concerns raised by most of the interviewees during the fieldwork.

In addition to these official documents, formal studies, presentations, opposition calls and reports published (or released) by non-state organisations (mainly NGOs and platforms such as Fethiye-Saklıkent Koruma Platformu (FSKP, Turkish acronym, Fethiye-Saklıkent Protection Platform) and Yuvarlakçay Koruma Platformu (YKP, Turkish acronym, Yuvarlakçay Protection Platform)) are widely utilised. These support the official information and field visit findings. The majority of these documents were directly provided by the local people during field visits, and most of them were not available online or nationwide. Such documents can be compared and contrasted with the information formed by the officials. These non-governmental documents are noteworthy since NGOs and platforms tend to provide comprehensive accounts on the local HPP processes while supporting them visually through photographs (showing the visible impacts of HPPs, proposed HPP sites and their importance for locals and environment etc.), PowerPoint presentations (comparing official documents with HPPs' potential impacts on different localities) and journals, which recorded day-by-day activities during the HPP processes. The main aim of locals' to create these documents is to challenge the HPP policies through the demonstration of their impacts and contradictions they faced; publicise their struggles; convince outsiders and policy makers; and, most importantly, justify their struggles. Due to the lack of official environmental data on these localities, as well as comprehensive sociological works on their traditions, lifestyles, livelihoods and social relations, these documents are crucial. They detail (potential) socio-environmental impacts of the processes by providing inventories and evidence, while

representing subaltern concerns at the expense of official information. They are also important since they represent the only available source detailing the public reactions, especially for the case areas studied. Above all, they are essential because of their general writing styles, which are in a narrative or journalistic form. This provides an understanding of the stances of environmentalists, and demonstrates how environmental discourse is reflected in these initiatives and has influenced the HPP processes. Thus, the combination of the analyses of both types of documents, official and non-official, broadened the research, searched for the reality placed between these two poles (official information vs local knowledge), and formed a well-equipped environmental justice claim, assisted by two opposite sets of information, provided by these documents.

In conclusion, document analysis is used as a research method to create the bases of case study analyses. This is especially true concerning the process of identifying socio-environmental (in)equalities caused by HPPs, and in providing background information on the case areas. At this point, it is important to underline that this research did not entirely depend on document analysis, since there was a risk of being misguided by them (since both official and organisational documents represent subjective information on the topic that may overlook experiences of the locals) (see Yin, 1994). However, they still provide considerable data on the HPP process in Turkey and local sites, while also shaping the case studies and field visits.

#### 4.4.1.2.Mass Media/Social Media Analysis

Mass media/social media analysis was used as a research method in this research. Newspapers, documentaries, radio programmes, TV programmes and videos, both at the national and local scale, provide a wide range of primary data and illustrations available on the HPP issue in Turkey, including for the case study areas of this research. These mass media outputs are examined to unpack different dimensions of Turkey's HPP. They provide an opportunity to analyse the socio-environmental impacts of HPPs and public reactions nationwide. In Turkish media, at the national and local level, coverage on socio-environmental impacts of the HPP constructions, declarations of state officials, the legal processes regarding HPPs and historical development of the local opposition movements against these constructions has increased in recent years. This issue has even become visible

in international media (see, for instance, Gibbons and Moore, 2011 in *The Guardian*). Moreover, newsletters of local and national NGOs on HPP issues present immediate updates about legislative changes and recent implementations, in addition to the legal processes and socio-environmental issues faced in different construction sites. Furthermore, amateur and professional documentaries, such as '*Sudaki Suretler* (Faces of the Water, 2011)' and '*Akıntıya Karşı* (Against the Current, 2010-2012)', which particularly focus on anti-HPP struggles of Turkey, elicit examples that further help to evaluate locals' motivations behind their opposition. They also document the socio-environmental issues caused by the HPP constructions, which were also narrated in journalistic publication of Mahmut Hamsici (2010). Besides these documentaries, *Açık Radyo* [Open Radio in Turkish] broadcasts programmes on the HPP issue, transcriptions of which are available online as well as in audio form. These provide different opinions from different HPP sites, through which, for instance, the contact people in the case study areas were identified.

In addition to the aforementioned mass media coverage, social media tools have vital roles in the HPP processes, as well as in this research. Analyses of the social media provide primary data on the HPP processes at the case study areas. The online platforms like YKP and FSKP, for instance, compile and release the official documents issued in the HPP processes of these localities such as petitions, court decisions and EIA reports. In addition they provide frequent updates from the local processes and video uploads, showing the immediate environmental impacts of HPPs, demonstrations, public information meetings and interviews with the local people (when these issues were hot topics there). The Facebook and Twitter pages of these groups, as well as national platforms such as '*Çevre ve Ekoloji Hareketi Avukatları* [Lawyers of Environmental and Ecological Movement]', '*Ekoloji Kolektifi* [Collective of Ecology]'and '*Çevre Direnişi Atlası* [Atlas of Environmental Resistance]' and anti-HPP activists' accounts, are followed to receive day-by-day updates about public reactions and ongoing legal struggles.

All of these sources can be classified as primary data. Both HPP opponents' and proponents' opinions and evaluations are revealed more through the extensive analysis of such media products. For instance, the mainstream media's TV programmes and newspapers prioritise a wide range of declarations and justifications from high-ranked state officials on HPP issues. On the other hand, although it is limited, news coverage on local HPP incidents, particularly

on environmental impacts and public reactions, are also publicised in the national media. These are analysed to understand the general implications of the HPP processes at the local level. Local newspapers provide more detailed accounts on the localised HPP processes followed in the case areas, while people actively use social media tools to publicise their struggles. All of these are significant since their narratives and descriptions are supported through visuals and further evidence, clarifying such impacts and solidifying spoken (in)justices. Above all, in a broader context, these media tools show how water and HPP process have been discursively constructed since the beginning of the recent HPP phase, while demonstrating the formation processes of public reactions and challenging these policies and existing discourses. In the end, it was mass media/social media analysis that deepened the historical and spatial dimensions of this analysis, while easing the application of other qualitative tools.

#### 4.4.1.3.Discourse Analysis

Discourses have been particularly prioritised with the introduction of social constructionist approaches to environmental studies. These have been widely applied in analyses of the nature/society dichotomy, and they have been utilised to search for the social context behind environmental issues. Hajer (1995:43) defines that 'discourse is…seen as an ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities'. Accordingly, scholars such as Foucault (1972), Hajer (1995), Fischer (2003) and Hajer and Versteeg (2005) underline that discourses and discourse creation refer to an ongoing process, in which power relations have an important role in defining and shaping the problems, language, knowledge and actions in a policy process. Fischer (2003: 82) exemplifies that the scientific experiments, technologies promoted in a policy process and legislations enacted to enable their implementations are all parts of a discursive construction process. Discursive mediation processes point an issue as governable and they also reflect/are reflected by a larger ideological context (see Foucault, 1972). By doing so, knowledge can be controlled within the existing power relations that reflects the intertwined nature of power and knowledge (Hajer and Versteeg, 2005). Accordingly, discursive tools such as 'accepted idioms…; available vocabularies…, frameworks of argumentation, and narrative

approaches' are used to create storylines that create partly constructed realities influencing the policy processes (Fischer, 2003: 80).

This method is applied in this research to discover the social context of the HPP policies and their implications, while also questioning the given knowledge on these issues. It permits the examination of texts, official and/or produced knowledge, mass media/social media outputs and personal stories, aiming to reveal the social reality embedded in the HPP processes. Such an analysis links theories, concepts, ideologies and practices, which are hidden in the practices and perceptions of the actors involved/affected in the policy process. Thus, as a part of this research's epistemological and ontological bases, which are respectively interpretative and constructionist, discourse analysis is applied to process data and form knowledge in this research process.

The available information (official, organisational and academic) about the HPP process is investigated through discourse analysis to unearth the social reality hidden in these sources of information. Analyses of vocabularies, idioms, frameworks of argumentation and narratives (see Fischer, 2003) derived from documents, interviews and mass media/social media outputs, helped to substantiate the cases within the framework of environmental justice. Thus, this method is used since the socio-environmental issues shaping the process of HPP development in the case areas are embedded in the abovementioned outputs, especially in the interviews. These are uncovered through analysis of the above-listed linguistic tools, and will eventually solidify environmental justice claims.

### 4.4.2. Field Visits

Field visits constitute an essential part of this research. This is because the stories and experiences of people and observation of socio-environmental aspects of HPP issues elaborate on the conceptual discussions held within this research, while also revealing the local implications of national policies. Accordingly, the data derived through these methods are analysed through the abovementioned methods of desktop study to deepen the spatial and historical dimension of the research, and to solidify the concepts and theories discussed along with this research through people's experiences in HPP processes. As implied earlier, the methods of data collection during field visits were ***interviews***, ***group interviews*** and ***observation***. Before delving into each method, it is important to indicate at this point that 73

people were interviewed in total, which will be separately introduced under Interviews and Group Interviews. A snowball technique was used to select and reach to the interviewees. It is also important to underline that ethical approval was sought for this study prior to field visit and conduct of interviews. The approval was granted on February 20, 2014 by the University of Dundee Research Ethics Committee (the approval is filed with the author).

#### 4.4.2.1. Interviews

Semi-structured and unstructured interviews were conducted in field visits. Bryman (2008: 438, emphasis given in the original text) defines **semi-structured interviews** as that '[t]he researcher has a list of questions or fairly specific topics to be covered, often referred to as an *interview guide*, but the interviewee has a great deal of leeway in how to reply'. Although a list of questions as an 'interview guide', it was not pursued in an orderly way, and follow-up questions were improvised depending on the context of the interviews and the reactions of the interviewees. In addition, **unstructured interviews** are conducted occasionally with local people, where the interviewee and the interviewer 'come together to create a context of conversational intimacy in which participants feel comfortable telling their story' (Corbin and Morse, 2003: 338). Following these styles, the interviews are divided into two sets as the ones with experts, officials, and professionals and the ones with local community. Before detailing the structures and natures of the interviews, it is significant here to note that the identities of interviewees are not disclosed in the research. Rather, a number is allocated to each interviewee and group interview (e.g. Interviewee 1 or Group Interview 3) to protect the privacy of the interviewees.

The first set of interviews with professionals was undertaken in İstanbul, Ankara, Fethiye and Dalyan. These interviews were conducted with two local DSİ officials in Fethiye, two DSİ officials in Ankara, two retired high-ranked ministerial officials, nine NGO representatives (from Fethiye, Dalyan, İstanbul and Ankara respectively), three lawyers (Fethiye), one company representative (in charge of Yuvarlakçay and Söğütlüdere projects, operating in Ankara), one local administrator (Municipality of Fethiye), two MPs and one journalist, all of who were individually interviewed (see Appendix II for their description). These interviews essentially aimed to comprehend the general relations and processes embedded in Turkey's HPP process. Accordingly, the pre-field visit desktop analysis is

reinforced through experiences of professionals in Turkey's and Western Mediterranean Province's HPP process. In this sense, the issues and questions directed to them attempted to reveal how HPP processes were implemented in Turkey and case areas; how state/society/water relations were shaped in the HPP process; to what extent modernist (and neoliberal) notions were demonstrated in the policy process; and, how water was materially and discursively mediated in the HPP process. In addition, interviewees were urged to introduce their own evaluations of the HPP process and give particular examples of how HPPs have changed socio-ecological conditions at the local level. This first set of interviews was also expected to generate data about the specific issues and processes experienced in the HPP processes at the case study areas. Accordingly, the HPP experiences of these professionals are significant in understanding the HPP processes in Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay and the justice claims associated with these processes.

Open-ended questions, concentrating on the abovementioned parameters revolving around the three dimensions of environmental justice, were also directed to these people, who expressed the issues experienced in these fields from their point of view. This eventually solidified the environmental claims as seen in the Chapters 6, 7 and 8. For instance, the lawyers' description of process determined the key experienced issues of participation, while NGOs and local administrators underlined the issues of distribution and recognition faced in the HPP processes of these areas. The main questions asked to them were how HPP process were prepared and operated in case study areas; whether they led to any socio-ecological problems there; to what extent socio-ecological differences and peculiarities were addressed in HPP processes; and how the ideal HPP process would be for them. These questions were designed to explore how they perceived HPP processes, and how the processes were operated in the case study areas.

The second group of interviewees were local people, inhabiting the areas around the (proposed) construction sites, who could be affected by the operationalization of them. During the field visit, ten people were individually interviewed in Yuvarlakçay (one of them was a local administrator), eleven in Kargı-Yanıklar (one of whom was a local administrator), and one in Saklıkent (a local administrator) (see Appendix II for their descriptions). These interviews mainly endeavoured to reveal what sort of socio-ecological issues had been experienced by locals during the HPP processes. Generally, the questions asked were

designed to encourage locals to compare how their lives (socially, culturally, ecologically and economically) have changed due to HPP constructions and debates. Accordingly, some of these questions were: if their access to water and land has changed; if their livelihoods have been improved or damaged; if their social, cultural, economic and environmental peculiarities have been considered, and; if their physical environment has been damaged due to HPP constructions (see Appendix III for all sets of interview questions). In other words, these questions aimed to investigate to what extent their local environment and social conditions have changed/would be changed due to HPP constructions in these localities, and what motivated them to form their reactions against these projects. Furthermore, questions about the level of public participation and procedural issues, focussing on the issues of procedural environmental justice, were essential in the field. The narrative answers of the locals addressed the entire HPP processes, local experiences of legal struggles, EIA processes, construction and operation processes and monitoring processes as well as the recognitional and distributive factors shaping these processes. In other words, the questions directed to uncover the procedural issues were expected to reveal the background of public reactions (opposition movements/consent for constructions), but they provided significant data about the distributive and recognitional issues caused by HPP developments.

On the other hand, the questions on what water means to them and how they describe water's role in their daily lives were directed to the both groups of interviewees. These questions, asking for their personal perceptions of water, helped to determine how different meanings of water exist and how these transform society and nature. These questions also lead the interviewees to narrate their views about their villages, indicating place attachments and the positivities/negativities of their region. In addition, questions asking for their evaluation of HPPs hinted at how water policies were reflected there, and at what the state's role was in the production of socio-environmental transformations. The state's role in such transformations cannot be directly asked to locals in Turkey due to the complexity behind Turkish social life; people are hesitant to talk about political issues openly especially with an outsider who lives abroad. Hence the above questions aimed to obtain these insights on state/society/water nexus, which could then be unearthed through discourse analysis.

To summarise, these semi-structured and unstructured interviews, consisting of the above-exemplified questions, provide primary data for this analysis, and take the focus of this

research from theories and concepts towards people's experiences regarding the HPP processes. They also provide the raw data for interpretation to uncover the socio-environmental implications of the HPPs. This helped to solidify the justice-related issues with the trivalent understanding of environmental justice, while also depicting socio-environmental transformations, social relations and state/society/water nexus, in which local manifestations of modernist agenda of the Turkish state were attempted to be uncovered.

#### 4.4.2.2.Group Interviews

Group interviews are used as a method to collect data at field visits. They can also be classified as focus groups, which are frequently applied in social sciences as a qualitative research method (Morgan, 1998: 1). In this method, questions are discussed by a group of people facilitated by a moderator or facilitator (in these cases, the author and occasionally two contact people). The aim is to create a platform for participants to share their knowledge on the topic, with minimum intervention from the facilitator/moderator (Bryman, 2008, see Morgan and Kruger, 1998). The main aim was to stimulate the interaction between participants, and enable them to share their experiences, narratives and knowledge, as stated by Bryman (2008). In this research, group interviews are conducted within local communities, living around the (proposed) construction sites, DSİ officials and NGO representatives. Eight group interviews were conducted, in which the number of groups ranged between two and seven people. In detail, these included four separate group interviews in Demirler (four people), Eşen (three people), Çukurincir (two people) and Palamut villages (five people) of Saklıkent HPP, two separate groups (in total ten people) for Söğütlüdere HPP, one with two representatives of a prominent NGO in Ankara (two people) and one with two high-ranked DSİ officials in Ankara (see Appendix II for their description). While they are generally referred as 'Group Interview [Number]', they occasionally referred to individuals when a direct quotation was used. The issues discussed and questions directed in these interviews were similar to the ones formulated above. These aimed to clarify the HPP process and social relations in case areas and identify distributive, recognitional and procedural issues that had emerged due to HPP processes, while also substantiating state/society/water relations and local manifestations of the modernist agenda of the Turkish state.

#### 4.4.2.3.Observation

Observation is also applied as a qualitative method during field visits. As Angrosino (2005: 729) claims, '[s]ocial scientists are observers both of human activities and of the physical settings in which such activities take place'. There are numerous ways of conducting observation. In this research, the participant observation method is used, which 'simultaneously combines document analysis, interviewing of respondents and informants, direct participation and observation, and introspection' (Denzin, 1978: 183 cited in Patton, 2002: 265). At this point, it is important to note that this research neither claims to be neither anthropological nor does it dare to conduct an extensive ethnographic research to create a report on socio-cultural issues of the case study areas. However, this method is used as a way to observe social relations and physical (visible) impacts of HPPs in case areas, which are crucial to substantiate environmental justice claims.

In this research, 24 days were spent in Fethiye and Yuvarlakçay in May 2014, when relevant villages and construction sites were visited on a daily basis. This was repeated for another 15 days in October 2014, which enabled the direct observation of how HPP processes impacted on social relations and the environment. Although anthropologists may challenge this point, due to the relatively short period of time devoted to observation in contrast to their lengthy ethnographic works, here it should be noted that '[f]ieldwork should last long enough to get the job done—to answer the research questions being asked and fulfill the purpose of the study (Patton, 2002: 275)'.

During the fieldwork, it was possible to see how water takes place in the local's livelihoods by observing their daily practices and cultural activities. For example, the author was able to take part in the annual festival of the locals, where they celebrate the arrival of spring and reportedly pray to water (they also commemorate their resistance against the HPP construction in Yuvarlakçay on the last Sunday of May 2014). Furthermore, the existing socio-economic issues, remoteness and relative underdevelopment of Söğütlüdere Village was observed, which reportedly played an essential role when local people consented for the HPP construction. In addition, the author was able to observe a *Liquidambar orientalis* population in the Kargı Basin, an area cleansed of trees in the Yuvarlakçay Basin, and the proximity of historical and touristic places in the Eşen Basin and the importance of

agriculture and animal husbandry to the locals of the case study areas. Above all, the participant observation supported the data derived through the interviews and group interviews. For instance, in all the cases, seeing the (proposed) construction sites prior to interviews informed the understanding of what locals meant about the (potential) socio-environmental impacts of HPPs. This method is also important in confirming/falsifying information provided by interviewees or focus group participants, which sometimes might be prejudiced and overshadowed by their cultural, religious and political interests.

### 4.5 Research Scope and Limitations

There were inevitable limitations in this research. Firstly, it was not easy to conduct interviews during the field study. As a Turkish male living abroad and affiliated with a British university, at first step, it required some time for local people, especially the initial contact people, to trust and accept the author before they opened themselves up. This is related to the complexity of Turkish politics, in which people questioning state policies are generally thought as 'intelligence agents' by the local communities. However, this hindrance was overcome with the support of local contact people and their facilitation of interviews with the local communities. Related to this point, as a Turkish male, the author struggled to talk to women at the villages due to customary reasons. Although it was possible to have a gender-balanced interviewee list in interviews with experts, and Kargı-Yanıklar and Yuvarlakçay cases, where the author was able to directly talk to women about the HPP process, this did not happen in the Saklıkent and Söğütlüdere cases, despite the author's request. One of the participants of the group interviews in Söğütlüdere, for example, stated that 'there is no need to talk to women, they also back our words', which clearly blocked interview opportunities with the local women although a few interviews were achieved.

Secondly, HPP development projects are sensitive issues, which were also politicised in the case areas as seen through the public reactions. The nature of these projects did not directly arise during the fieldwork, but it was the main reason that the majority of the interviewees did not want to be recorded during the interviews. Accordingly, due to this reason and abovementioned affiliation of the author, the interviewees were not required to sign the ethical consent forms to ensure their contribution to this research. Turkish culture, especially in rural areas, does not welcome the provision of signatures or written consents for such

sensitive issues. Insisting that the forms were signed would present serious problems in accessing interviewees at these localities. Hence, only verbal approval was sought for the interviews. Relevant to this issue, the use of questionnaires and surveys at the local HPP sites, was limited due to the reluctance of the people to provide any sort of written information regarding such sensitive cases. These issues were stated in the application of 'Ethical Approval' and agreed by the Committee ethically approved this study.

Thirdly, this research overall remains contextual due to its focus on a specific part of Turkey, which hinders the making of generalisations. In other words, these HPP processes represent unique socio-environmental and historical processes. To overcome this barrier, research was focussed on the most frequently seen public reactions in the HPP processes of Turkey, as explained above, to have a general idea about entire HPP processes of Turkey. Although these cases remain unique, they still allow the formulation of an environmental justice framework at the end of this research, since the motivations of people in shaping their public reactions remain similar when compared to fieldwork in a similar research in 2012 in Eastern Anatolian Province, as well as comparisons with the works such as Hamsici (2010) and Islar (2012a, 2012b). However, the research is relevant primarily to the HPP process and other segments of the water management of Turkey, and cannot be generalised towards the other policy realms such as wind/solar energy generation. Components of final framework could be adapted to such analyses in the future, however.

### 4.6 Summary

This chapter aimed to bridge the concepts and conceptual framework introduced in Chapter 2 and Chapter 3 with the rest of the study. The main focus of the chapter was the solidification of abstract concepts of environmental justice and modernisation, along with the parameters and questions. These will be operationalised through the analyses of the cases studies in the remainder of this research.

It was highlighted that the deconstructions of the policy processes of HPP at the national level and public reactions at the local level will reveal the socio-environmental (in)equalities experienced at the case study areas, while also providing insights on the reflections of the modernist ideology on the Turkey's HPP process. These processes were managed through

the application of qualitative methods. These are desktop study (covering document analysis, discourse analysis and mass media/social media analysis), and field study, in which in-depth semi- and un-structured interviews and group interviews were conducted as well as participant observation.

This chapter also introduced the case studies, and briefly introduced the study sites, through which this conceptual framework will be solidified in the rest of the research. After also indicating the scope and limitations of this research in the final section of this chapter, starting from the next chapter, the HPP process of Turkey will be analysed in detail (Chapter 5), followed by the socio-environmental implications on the case study areas within the context of environmental justice (Chapters 6, 7 and 8).

# CHAPTER 5: PROCESS OF THE FORMATION OF SOCIO-ENVIRONMENTAL (IN)EQUALITIES IN TURKEY'S HPP PROCESS: DECONSTRUCTION OF TURKEY'S WATER POLICIES (1923-ONWARDS)

## 5.1. Introduction

It was May 2014, when I was wandering around Kargı Stream, a small watercourse located in Fethiye in the Western Mediterranean Province of Turkey. Alongside the stream, there were entrepreneurial tourist ventures, ranging from eco-tourism hubs to five-star hotels; agricultural activities including citrus yards, olive groves and various fresh vegetables and fruit gardens; and fish farms. Surrounding the stream,irrigation canals, which were full of water, caught my eye. Furthermore, trees of *Liquidambar orientalis*, which are endemic to the region (and are classified as endangered species) were also present along with pine and plane forests. The landscape of this small basin, featuring the above attractions, would be threatened if the HPP construction was ever realised there. Between 2011 and 2014, there were a series of public protests against an attempted HPP construction, which was taken to the court by the locals. Although this construction was avoided due to the court decision, there are still three more outstanding HPP development plans on this small brook (Demir, 2011). When talking with the locals about these potential constructions, one interviewee, who had recently settled in the village with his foreigner family, angrily stated that 'I dragged my family here ***for this*** [pointing to the brook and garden composed of citrus and pomegranate trees], ***for water***. If anyone attempts to take it away from me, I would be the frontrunner of a new opposition'.

At the end of the field study in this village, the author returned to Fethiye. Whilst interviewing the lawyers and activists there, they underlined additional HPP development projects, estimated at around 35, targeting the small streams around the town. During this visit, for example, in a village around 50 kilometres away from Fethiye, a harsh public opposition broke out against an HPP construction, which was not analysed in this study, while an ongoing struggle against multiple HPP constructions on Alakır stream, located next to Fethiye, has also evolved into eruption of additional protests (see *Milliyet*, 2015).

Such local socio-environmental transformations, and the current socio-environmental (in)equalities bound to the HPP developments, are the main focus of this research. Although

such a statement hints that HPPs are to blame for those transformations and inequalities, it would be shallow to only focus on them in analysing the deep causes of the current socio-environmental inequalities of the HPPs. It is basically Turkish water politics, shaping current social relations and environmental changes occurred by the HPPs at different localities. Accordingly, the analysis of Turkey's water politics, in which water is mediated through multiple simultaneous processes including ideological, discursive, technological, social, economic, political and natural ones, reveals how current HPPs are conceived and implemented. This analysis also reveals how these local socio-environmental transformations are produced within the broader area of Turkish water politics, while documenting how these inequalities are traced back. This chapter, therefore, elaborates the role of water and water politics in Turkey's modernisation process, revealing the deep causes of today's socio-environmental inequalities that are bound to the HPP process.

As scholars such as Swyngedouw (1999, 2007 and 2013), Budds (2008, 2009), Linton (2010) and Linton and Budds (2014) argue, nature (in this case water) and society are co-existent. Accordingly, they describe 'waterscapes' as entities holding socio-natural characteristics. They state that multiple simultaneous social, natural, cultural, technological, ideological and discursive processes and interactions produce these waterscapes, while also being produced by them. By focussing on these multiple processes through a historical approach, this chapter reveals the process of the socio-natural production of Turkey's waterscape. This includes recent socio-environmental transformations that have occurred due to HPP development. By doing so, this chapter seeks for indications that modernisation (processes and ideology) is a deep cause of the socio-environmental (in)equalities. This analysis then aims to formulate them as an explanatory framework for environmental justice analyses. This will be reinforced in Chapter 9, following the case study analyses.

## 5.2 Water Politics in Modernising Turkey: Water in Economic Development, Social Progress and Changing Landscapes (1920-1980)

Discussing Turkish politics requires the consideration of its modernisation process, since this sets the political perceptions and administrative traditions of Turkey (see Adaman, Akbulut and Arsel, 2014). Hence these HPP policies cannot be separated from Turkey's modernisation. Accordingly, the history of Turkey and its water politics should be brought into greater focus to understand current trends better. The modernist agenda of Turkey, revolving around the objectives of achieving economic development and social progress (or eventual Westernisation of the country) was emplaced in the late Ottoman period. At that stage, the Committee of *İttihat ve Terakki* (Union and Progress), and relevantly the *İttihat ve Terakki* movement in the late Ottoman period, should be mentioned specifically (see Bozdogan and Kasaba (eds), 1997). The Committee of *İttihat ve Terakki* is a political institution that emerged in the dissolution process of Ottoman Empire. It influenced the late Ottoman politics by mainly aiming for 'union' (among the different nationalities within the Ottoman Empire under the umbrella of Ottoman identity) and 'progress' (referring to the Empire's wish to be Westernised) of the Empire to mitigate/prevent its further dissolution (see Zürcher, 2004). In its essence, it would not be wrong to suggest that *İttihat ve Terakki* was a broad identity building and modernisation project, which emerged in the late Ottoman period. The new Turkish administration consisted of people (including Atatürk) from the background of the *İttihat ve Terakki* movement (see Adaman and Arsel, 2005). That is to say, the group referred to as the Kemalist elite in the literature had experiences in this committee and movement, the legacies of which created the backbone of Turkey's modernisation agenda. Hence the early Turkish politics can be perceived as a continuity of a broad process that originated in the late Ottoman politics (see Bozdoğan and Kasaba (eds.), 1997).

It can be argued that modernisation has become a state ideology since the foundation of the modern Turkish state, eventually aiming at 'reaching the contemporary level of civilisation', as stated in a widely known quotation by Atatürk. In this context, the socio-economic policies of the early republican regime aimed to: create a secular state on the basis of Turkish identity; complete its industrialisation; and transform from a traditional to a Western society (see Bozdoğan and Kasaba, 1997). These aims were consistent with the political agenda of the *İttihat ve Terakki* movement. It was presumed that modernisation could only be achieved

through Westernisation, which would eventually be expected to promote richness, prosperity, welfare, science, knowledge, freedom, and advanced civilisation in Turkey (see Bozdoğan and Kasaba, 1997). Such an understanding has resulted in the implementation of top-down pro-modernist policies and radical reforms by the Kemalist elite, which still dominate Turkish political and socio-economic circles (see Adaman and Arsel, 2005).

To realise these modernist dreams (mainly economic and social change through industrialisation, see Kaika, 2005), policies such as urbanisation, agricultural development and energy generation have been developed. The taming water resources through hydro-engineering projects has also emerged as a vital part of this agenda (Şekercioğlu et al, 2011). When discussing how modernisation is related to water governance, it is evident that since the birth of the Republic of Turkey, particular attention has been paid to the utilisation of water. That is to say, since the early Republican period, water has been perceived as a means of socio-cultural transformation, power consolidation, economic growth and indicator of national prestige and taming nature (Demirtaş, 2013). These instances can be seen in the different phases of Turkish water management history.

Although the Turkish Republic had very limited social, economic, and political resources prior to its foundation in 1923, it was during the early Republican regime that many important and influential water-related institutions were established (DSİ, 2014). The roots of today's influential institutions of water management were traced back to the Ottoman Empire, when it established the Directorship of Public Works in 1914. Its responsibilities included irrigation, drainage, flood protection, river navigation, building reservoirs and water allocation (DSİ, 2014). Explicitly attached to these responsibilities under the Ministry of Public Works (est. in 1920), the Expert Committee of Water was founded in 1925 (Büyükyıldırım, 2008 and DSİ, 2014). The General Directorship of Water was founded in 1929, reportedly due to the drought and subsequent famine in Anatolia between 1926 and 1928. Its aim was to centralise water allocation and provide protection against such extreme events (Büyükyıldırım, 2008). Atatürk celebrates the foundation of this Directorship as follows:

> 'The organisation of water works and its studies are still in the egg. The technical capacity and strength of public administration of water works, which is among one of the main precautions of our economic status, necessitate to be established reliably[16]' (DSİ, 2014).

This quotation clearly shows water's role in economic development of Turkey. It also demonstrates the influence of the modernist ideology on water politics, by underlining the necessity for a strong technical and institutional framework to manage water. With the creation of the Electrical Power Resources Survey and Development Administration in 1935, all these institutions 'investigated the development potential of water and land…[by] explor[ing] the country's hydropower potential, and…carry[ing] out civil works and land development as well conducting preliminary hydrological survey' (Tiğrek and Kibaroğlu, 2011: 27). Early practices of those institutions demonstrated that water and, in particular, its imminent hydro-technology capacity, would provide an unequivocal vehicle towards economic development and social progress for Turkey.

These developments gave their first visible outcomes in the first two decades of the republican regime, with the completions of Atatürk State Farm Reservoir (1925), Çubuk Dam (1936; the first dam of the republican Turkey), and Youth Park (1942) in Ankara (Demirtaş, 2013). In addition to the reservoir's and dam's contribution to the country's economic development, Demirtaş (2013) also argues that water has been used as a tool to shape the societal life and habits of Anatolian population as a part of the modernist agenda. For instance, through these constructions, the Anatolian population, living in landlocked areas, was introduced to leisure activities like sailing and swimming. Furthermore, 'modern' Turkish women, (without headscarves and with their swimsuits) spending leisure times with men within these facilities, were frequently featured in political campaigns, lifestyle magazines and advertisements related to these constructions (see also Turan, 2013). In addition, these projects can be seen as the first instances of human mastery in changing the landscape through science and technology, given that artificial 'seas' were created in arid and landlocked areas of Turkey (Demirtaş, 2013). Demirtaş (2013: 27-28) elaborates as follows:

> 'They [referring to these constructions] are celebrations of both the technological object and artificial nature in terms of their aesthetic statements and functions. Although they are expressions of social

[16] This quotation is located at the upper banner of the official website of the State Hydraulic Works.

> engineering and state power, they also operate as places of popular empowerment, for they seek to transform everyday life as well. They are ambivalent in what they represent: modern and innovative spaces of a new nation, yet with allusions to the lost past and its capital.'

All of these initial water policies imply that water and hydro-constructions have been used as a means of socio-cultural transformation, secularisation (by featuring women in these sites) and economic development. In addition they can be considered as indicators of the scientific-technological capabilities of the country, as a matter of national pride. They could arguably be described as the reflections of modernist ideologies in Turkey's water policies.

The General Directorship of Water was converted into the Chairmanship of Water in 1939, and this transition accelerated feasibility studies and measurements (DSİ, 2014). Although the Second World War briefly interrupted the major socio-economic and political reformations in Turkey (despite the country's neutrality during the war), water politics gained momentum in the domestic agenda subsequent to the War. Before delving into the water politics, the 1950s have to be particularly mentioned for Turkey. After the Second World War, there was a turning point in Turkish history -the victory of Democrat Party (DP) in the 1950 general election. This put an end to the one-party rule of Republican People's Party (RPP), established by Kemal Atatürk as the first political party of Turkey. The DP used populist language and anti-elitist discourses, enabling them to get wide support from the rural population (see Turan, 2013). This ideological and rhetorical shift did not result in a break of Turkey's modernist dreams, however. For example, in their decade-long rule, Turkey continued to position itself in the Western world, notably by becoming a member of NATO (1952) and applying to the European Economic Community (EEC, today's EU) for full membership (Bağcı, 2001). In addition, the commitment to achieve socio-economic development through industrialisation, and the idea of national developmentalism, were still at the top of the agenda of DP, although the Turkish economy was faced with fundamental changes. That is, more liberal economic policies had been introduced instead of the complete protectionist policies pursued in the rule of RPP, along with the post-war developments in the world and Turkey's ultimate goals to become the part of the Western world (see Eralp, 1990 and Boratav, 2012). Although the DP government's ideology and their policies radically differ from the RPP's, the continuity of modernist objectives in the policy processes are still noteworthy: the DP was wholeheartedly committed to the Western bloc and prioritised economic development and social progress at the different policy domains.

These newly introduced liberal principles, and the accelerated industrialisation, were reflected on Turkey's nature, while the modernist ideology was also reinforced. This can be examined through Turkey's agriculture and water policies during the DP rule. Between 1950 and 1960, along with the global trends of green revolution, Turkey increased its use of agricultural technologies and pesticides (Akbulut and Adaman, 2014). It also introduced incentives for agricultural production and it initiated commercial agriculture to increase the efficiency of agricultural production, which was still the main portion of the Turkish economy (Akbulut and Adaman, 2014). This, in turn, led to an increase of land use and to a deterioration of environmental conditions due to excessive pesticide usage. It also highlighted the necessity of development of hydro-engineering projects to provide water for irrigation (Akbulut and Adaman, 2014). As a result of this necessity, as well as the rhetoric of increasing energy demand, the Chairmanship of Water was restructured and renamed as *Devlet Su İşleri* (State Hydraulic Works, DSİ, Turkish acronym) in 1954 (Bayazıt and Avcı, 1997). In other words, water governance in Turkey gained momentum in 1954, when the abovementioned institutions were formally merged into the foundation of DSİ – an engineer-dominated water bureaucracy responsible for the central planning of water policies. This accelerated the spread of expert knowledge-oriented water governance practices based on hydro-constructions in Turkey (see Box 1 for the main objectives and missions of DSİ).

**Box 1: Main duties and Objectives of DSİ**

At this point it is essential to give more information about the DSİ, since it represents one of the most influential and well-established political institutions in Turkey, and still remains as the main actor in shaping Turkey's water policies and discourses. Founded in 1954, its overarching objectives were listed as 'projecting, constructing and managing hydraulic infrastructures as well as building a national water policy' (İlhan, 2009: 150). Its main objectives are officially listed as utilising Turkey's water, protecting it from harms, and improving the water and related soil resources in accordance with recent scientific and technological developments and Turkey's national interests (DSİ, 2014 and GAP, 2014). Particularly in relation to hydroelectricity, the current mission of DSİ (2014) can be stated as:

-Supporting and encouraging investments from private sector to hydroelectric energy production,

-Reaching technical and economic production potential in hydroelectric energy,

-Taking the responsibility of initiating HPP projects in the absence of private sector.

The DSİ is responsible for planning, managing, improving and operating all of Turkey's water resources, and it prioritises the construction of dams and reservoirs to ensure these duties (DSİ, 2014). It has the authority to delegate the use of water resources in various intentions, such as irrigation and energy generation to the actors like the private sector (DSİ, 2014). [17] As inferred from the institution's current role in water management, the DSİ represents a highly technocratic institution, making decisions regarding water resources from the centre with a top-down approach. In light of this information about the structure and main missions of DSİ, it could be claimed that the DSİ perfectly reflects the modernist notions, such as the superiority of technology and science over the nature, the creation of monumental human-made structures, the utilisation of nature for the sake of economic benefits and societal progress and the implementation of a highly centralised and top-down policy approach. This institution and its operations will be frequently referred to during the rest of the research.

Turkey experienced a military coup in 1960, leading to the removal of the DP government, but unsurprisingly, the ultimate aims of socio-economic development, rapid industrialisation and Westernisation remained in Turkish politics (see Eralp, 1990; Arsel, 2005; and Özveren and Nas, 2012). Right after the military coup, this understanding was actually further consolidated through the establishment of the *Devlet Planlama Teşkilatı* (State Planning Organisation, DPT, Turkish acronym) in 1960. This represented a state institution, which mainly composed of experts centrally planning Turkey's economic policies centrally. [18]

[17] See, Sümer (2011) for further details on the organisational scheme of DSİ as well as DSİ's website

[18] The existence of State Planning Organisation (DPT, the Turkish acronym), an institution centrally planning development policies of Turkey since 1960, and its five-year-development-plans (currently covers the period between 2014 and 2018), principally similar to Stalin's five-year-plans, are examples how early goals of economic development and industrialisation were infiltrated in Turkish politics regardless of the ideological

DPT's first five-year-development-plan indicated a shift in Turkey's economic policies towards import substitution industrialisation (ISI), to decrease the dependency of Turkish economy on foreign imports by promoting national industries and domestic production (DPT, 1962 and Boratav, 2012). This trend continued until the late 1970s. Arsel (2005:20) argues that this shift promoted 'trade protectionism' and further 'state involvement in industrial protection', concentrating on the potentialities of domestic production of the country as highlighted in the first five-year-development-plan (see, DPT, 1962). With the help of this policy shift, aiming to further nationalise and centralise the Turkish economy, the DPT also cemented the DSİ's role. These two technocratic state institutions shaped Turkey's water policies, to utilise from water in the form of irrigation (for agriculture and industry) and energy (see Islar, 2014), which led Turkey to initiate its hydraulic mission process along with other developing countries in the world (see Gleick, 2000). In other words, this economic shift towards ISI allowed the Turkish government to integrate water into the country's development policies by explicitly relying on discourses of the country's need for energy, food security and national energy generation through the interplay between the DSİ and DPT. Through the institutionalisation of these two organizations into the policy process, massive constructions of dams, irrigation projects, canals, sewage systems, urban water infrastructure and reservoirs have become integral parts of Turkey's economic development policies (see DPT, 1962 and 1967). That is, water and hydro-constructions have been prioritised in the country's economic development in the upcoming decades. Needless to say, ISI, DPT, and its five-year-development-plans further escalated the integration of Turkey's modernist goals into its water politics, while water became a vital source and policy domain in attainment of these goals.

This idea can be demonstrated through the policy practices of the 1960s. For example, in the first five-year-plan, with the impact of the initial studies undertaken by the DSİ, the exploitation of the hydroelectricity potential was shown as 'the main principle and method' to meet the energy needs of the country (DPT, 1962: 379). Water described as 'flowing in vain' when unutilised for irrigation or hydroelectricity and aiming to 'benefit more from

orientations of ruling parties (Özveren and Nas, 2012; Eralp, 1990; see also Akbulut and Adaman, 2014 for the domination of these early policies in the recent economic policies of Turkey).

electricity' and 'provide efficient operation of the power plants', as referred under the subsection of 'Electricity' (DPT, 1962: 379). To realise these principles, the DPT, in the same plan, called for the construction of large-scale dams on the Euphrates and additional hydroelectric power plant constructions throughout Turkey (DPT, 1962). These objectives were attempted to be realised widely by 1965. That year remarks the beginning of the prime ministry of Süleyman Demirel, who was the former head of the DSİ between 1955 and 1960. During his rule, the harmonious work between the DSİ and DPT became obvious in water politics, specifically in planning and implementation. For instance, DPT gave priority to 'develop water resources for meeting energy demand' with the necessity to construct 430 dams to regulate the hydropower potential in the second-five-year plan (1968-1972) (DPT, 1967: 558). It coincided mostly with Demirel's prime ministry (1965-1971), when the number of dams of Turkey have increased from 7 to 73, while 56 new dams were also projected (DPT, 1967: 558 and Çavuşoğlu, 2009). Such developments eventually led Demirel to be nicknamed as 'the king of the dams' in Turkish politics. Furthermore, water was now at the centre of the country's economic development, in support of agriculture (irrigation) and industry (energy).

The 1970s began with a turning point in Turkey-EEC relations. In 1970, EEC-Turkey relations were transformed by the signature of 'the Additional Protocol', classifying Turkey as an EEC candidate. This change has dominated and shaped Turkey's socio-economic and environmental policies ever since (Özveren and Nas, 2012). However, the 1970s are generally remembered for the political and economic turmoil in Turkey, for example when a military coup was attempted in 1971. In addition, a-decade-long socio-political chaos between the opposite ideologies (right-wing and left-wing) resulted in armed clashes between these groups in the streets and universities of Turkey. Meanwhile, Turkey also witnessed nine different governments (three of which were headed by Süleyman Demirel) in this decade, while also military intervention in Cyprus also occurred in 1974, leading to an immediate military embargo imposed on Turkey by the Western world (Hale, 2002 and Zürcher, 2004). In addition to global oil crises shook the world economy in general, damaging the vulnerable economy of Turkey, which had been in the process of nationalisation and was reliant on foreign trade due to ISI (see Hale, 2002). Despite this political and economic instability, the 1970s brought excessive population growth, rapid urbanisation and further industrialisation for Turkey (Keyder and Yenal, 2011). For example,

Necmettin Erbakan, the leader of the National Salvation Party (NSP), which was an openly Islamic party and a member of the coalition governments in 1970s, launched 'the heavy industry program' to achieve economic development and economic independence (see, Gulalp, 1999). It is significant to note that Erbakan and NSP were openly challenging the idea of modernity and its component of secularism, but their policies were still supporting and serving to the modernity's long-lasting dream to achieve economic development and rapid industrialisation.

This once again put the question of energy at the forefront of the political agenda, and encouraged the state institutions to concentrate more on hydropower development and irrigation opportunities, as continuously highlighted in the DPT's five-year-development plans (Tiğrek and Kibaroğlu, 2011). According to DPT's fourth plan (1979), the percentage of hydroelectricity in Turkey's total electricity generation increased from 31.6% to 41.8% between 1962 and 1977, while irrigated lands rose from 176,727 hectares to 1,520,540 hectares for the same period, mainly through the utilisation of Euphrates and Tigris rivers (see also Tiğrek and Kibaroğlu, 2011). In that plan, the role of the Keban Dam, one of the first monumental large-scale dams of Turkey, was explicitly praised in this dramatic increase in electricity generation and irrigation. The Keban Dam is still among the list of largest dams of the world and was completed in 1974. All of these developments in water politics during the 1960s and 1970s briefly elaborated in these two paragraphs explicitly demonstrate the reflections of modernist legacies on the water politics. This can be seen through its specific focus on economic development, a highly centralised way of policy-making with the involvement of the DSİ and DPT, the commodification of water (through its scientific and technological utilisation) and its utilisation as a source of national pride.

1980 witnessed the formal initiation of a large-scale, multi-sectoral, Tennessee Valley Authority type of water management in Turkey: the Southeastern Anatolia Project (*Güneydoğu Anadolu Projesi*, GAP, Turkish acronym) (see Warner, 2008). The DPT's plans, the DSİ's studies, and the domestic political and economic developments and the global crises of the 1970s together paved the way for the creation of this multi-sectoral development process. The GAP focussed on enhancing socio-economic regional development and irrigation and energy opportunities in the late 1970s (Tiğrek and Kibaroğlu, 2011). Although the GAP is not one of the main issues investigated in this research, it is necessary to

summarise the project to give an opinion on how water was situated at the centre of Turkey's modernist agenda.

The GAP presents an iconic case showing the modernist affiliations of Turkey's water governance. It is one of the largest-scale hydropower development projects in the world, integrating previously large-scale dam and reservoir projects on the Euphrates and Tigris rivers into a larger-scale regional development project (Çarkoğlu and Eder, 2005; Kibaroğlu, 2007). This extensive project consists of 22 dams, 19 hydropower plants, and excessive irrigation and drainage networks (Kibaroğlu, 2007). Together these are expected to generate annually 27 billion kilowatt-hours of hydroelectric energy, and irrigate 1.7 million hectares of land in the Euphrates and Tigris river basins of Turkey (Kibaroğlu, 2007). In addition, the GAP also aims to transform local societies, mainly populated by Kurdish people, by initiating a series of social empowerment goals in the region. These goals are still under dispute in the domestic politics, however, due to its social impacts like the resettlement of displaced people and damage to cultural assets (Çarkoğlu and Eder, 2005; İlhan, 2009; Kadirbeyoğlu, 2010; and, Scheumann et al, 2014). The development of this large-scale project also highlights that 'technical decisions' (in water governance) remain subject to the discretion of the centralised authorities in fulfilling the country's economic and social needs at any time (Kaygusuz and Arsel, 2005). The GAP has always depicted as a matter of national pride, however. For example, Suleyman Demirel (1997) described the GAP as 'the biggest project of the Republic', 'the biggest project of the world' and as a source of national pride when he reportedly toured the GAP region with his official guests during his presidency (*Sabah*, 1997). Looking at the presentation of GAP at the official level, this mentality can be demonstrated:

> 'Southeast Anatolia Project (GAP) is *the most comprehensive and expensive project of our Republican history*, while also being the most effectively implemented regional development plan and program among the others. With its integrated regional focus and sustainable human development philosophy, the *GAP is placed in the international literature and it has the brand value* (GAP, 2015; emphasis added).'

In this sense, the GAP not only constitutes a monumental construction, and a reason for national pride, but also demonstrates Turkey's ambition to maximise the utilisation of natural resources to achieve societal transformation and economic development, in line with the its modernist political agenda.

The historical development of Turkey's water management between 1923 and 1980 determines how the modernist agenda set by the Kemalist elite of Turkish Republic has influenced Turkey's water policies. This demonstrates that water governance practices have been shaped by an enduring modernist vision. Technocratic institutions such as the DSİ and DPT have been involved in the centrally planned water management practices of Turkey, where expert knowledge and implementation of hydro-engineering constructions like the GAP have been prioritised in the country. This section shows that water and water politics have played a significant role in attaining these ultimate modernist goals of the state. It could be claimed that Turkey's water politics have embraced the modernist visions by prioritising science and technology to tame nature, which has consolidated state power and ensured social transformation and economic development.

### 5.3 Water Politics in Turkey: Water in the Neoliberalisation of Turkey (1980-2001)

While the political and economic turmoil of the 1970s was carried into 1980, the decade started with a sign of a dramatic policy change for Turkey. To address the ongoing political and economic crises of the 1970s, under Süleyman Demirel's government, his Undersecretary of Prime Ministry, later prime minister then president of Turkey, Turgut Özal, presented a policy programme, known as 24 January Decisions, in 1980 (Pamuk, 2012). This programme suggested Turkey should depart from ISI and its protectionist economic policies towards a more open and liberal stance, one guided by the market rather than the state (Pamuk, 2012). However, politically, Turkey was not ready to implement this policy change, due to the ongoing social tension between left wing and right wing activists. The implementation of this policy change might have further escalated these social conflicts, since it would provoke a reaction from pro-labour groups, and the instabilities of the 1970s were still present in 1980 (Boratav, 2012). In September 1980, Turkey, once again, experienced a military coup, silencing this decade-long turmoil and resulting in Turkey being brutally ruled by the military and president Kenan Evren for eight years.

During the military regime and then under Özal's Motherland Party's (MP) rule, a series of neoliberal reforms were undertaken in Turkey. In a general view, MP's rule between 1984 and 1988 is indicated as the resurgence of populist discourses and policies, as experienced in

DP's rule in 1950s (Boratav, Türel and Yeldan, 1995). It was this time that Turkey abandoned the protectionist economic policies and initiated an integration process to the global economy by domestically promoting neoliberal economic policies (see Yeldan, 2006; Öniş, 2006). This neoliberalisation process commenced as a response to the economic instabilities experienced in the 1970s and it has made the involvement of global credit organisations', such as the World Bank (WB) and International Monetary Fund (IMF), inevitable (Öniş, 2006). This involvement has become visible in Turkish development policies with the introduction of the Structural Adjustment Plans (SAPs). These aim to harmonise the domestic economic structures of developing countries with the global economic system and are used as a condition for these countries when applying for credits and funding from these organisations (Harris and Islar, 2013). SAPs were also used to restructure the Turkish economy, which significantly impacted the environmental management and constituted the basis for the existing institutions and regulations in Turkey's environmental, water and energy management (Boratav, Türel and Yeldan, 1995).

In this neoliberalisation process, the role of the state in water politics seemed, at least in principle, to decrease by allowing more actors to be included. It could be argued that the state remained as the most important actor in the process, but, at the same time, it introduced further procedures and bureaucracy to water governance (Kibaroğlu, Başkan and Alp, 2009). It was during this period, stretching towards current water governance practices, that privatisation in water governance was enabled. The state still has a central role in planning, financing and operation, however (see Kibaroğlu, Başkan and Alp, 2009). For example, in 1984, the electricity market, which was among the first sectors to be privatised, was reformed through enabling private sector access to the market. This was further extended through the enactment of a series of new laws in 2000s to attract the private sector to the hydroelectricity market (Kibaroğlu, Scheumann and Sümer, 2012). Since the 1980s, municipalities, for example, were permitted to find external funding for infrastructure development for the provision of sewage and urban water services at the local scale (Çınar, 2009). This allowed municipalities like Antalya, İzmit and Çeşme (İzmir) to partly privatise these services (Çınar, 2009). For example, since 1993, the operation and governance of irrigation schemes has been transferred to the villages and municipalities from the mandate of the DSİ and Directorate of Village Works. These developments exemplify the decreasing role of the state in water governance practices (Svendsen and Nott, 2000).

Although Turkish economy and politics have gone through these radical changes, along with its neoliberalisation, the modernist view and its state-centric understanding were not completely abandoned in the 1980s. In effect, these complemented and further strengthened existing modernist policies (Harris and Islar, 2013). In water governance, the ultimate goals of the state to attain economic development and social transformation, still dominated the policy agenda. The 1980s were also politically chaotic for Turkey. In addition to the military regime, which continued until 1987, the 1980s saw the emergence of two ideological challenges against Kemalist modernisation, which are widely referred to as the side-effects of modernisation process of Turkey that had been pursued since the foundation of the republican regime (Mardin, 1997). These challenges were the resurgence of Islamic politics, and Kurdish issues leading to the increasing threat of Kurdish militia (PKK). Both of these issues were intentionally supressed by the Kemalist ideology to achieve a secular state based on the identity of Turkishness (Mardin, 1997). In particular, the Kurdish issue has been directly reflected on Turkey's water management through the GAP, through which water has been further emphasised as a means to consolidate state power (Çarkoğlu and Eder, 2005 and Harris, 2008). In line with the statist approach and policies formed by the DPT and DSİ, the GAP's implementation has been intensified in the 1980s, so as to achieve social development and eliminate developmental differences between the regions[19] within Turkey (Harris, 2008). This aimed to prevent the PKK from attracting the Kurdish population, and contributed to Turkey's energy production and irrigation necessities (Çarkoğlu and Eder, 2005; Harris, 2008 and Tiğrek and Kibaroğlu, 2011). It also increased the presence of the state power in the region to respond to PKK threat (Çarkoğlu and Eder, 2005; Harris, 2008 and Tiğrek and Kibaroğlu, 2011). This understanding shows that even when neoliberalisation process started in the Turkish economy, they did not fully diminish the role of the state in Turkey's water politics. Water has had a vital role in achieving societal and economic development and consolidating the state's power.

In the 1980s, the Turkish economy has achieved rapid economic growth due to the extensive neoliberal reforms held in that decade. At the end of the decade, however, the Turkish economy was faced with the problems originating from this fast neoliberalisation process (Öniş and Aysan, 2000). In the 1990s, mainly because of the further extension of the

[19] Southeast Anatolia is still the most underdeveloped region of Turkey.

neoliberal reforms in an uncontrolled way, even more than what developed economies did during this period, Turkey experienced a decade of economic and political instabilities (Öniş and Aysan, 2000). These instabilities were due to deepening structural problems and economic imbalances. The main political turmoil of the decade came from side effects of the modernisation process, resulting in the resurgence of Islamic politics (see Çınar, 2006). This peaked when Necmettin Erbakan and his Islamic Welfare Party won the 1996 elections. This leads to a controversial military coup attempt in 1997, resulting in the withdrawal of Erbakan from the government (see Çınar, 2006). In addition, the PKK threat has increased in the 1990s, and clashes between it and the Turkish army have caused a death toll of 35,000 people. The economic cost to Turkish economy of these clashes was around $120 billion between 1984 and 1999 (Barkey and Taşpınar, 2006). The modernist agenda of social transformation and economic development has been maintained to challenge these issues, based on the roles of water's and water politics, namely the GAP. For example, the initial outcomes of the hydro-projects realised under the GAP in the 1990s were used to promote 'new' social and economic activities for the local Kurdish population. These included the use of river for public transformation, and navigation and as a recreational area (Demirtaş, 2013). Furthermore, state-led promotion of the cultivation of new crops in the area, including cotton, demonstrate that the modernist agenda (of economic development and social transformation) has remained in use (see Demirtaş, 2013).

Due to the increasing the impact of neoliberalism in the Turkish economy and the continuing influence of the modernist ideology in Turkish politics, Turkey's water policies have been shaped by an understanding, which is a mixture of these two ideologies. In other words, not only state-led dam and reservoir constructions maintained especially under GAP with the central planning of DSİ, but it was also this decade witnessing neoliberal reforms like Build-Operate-Transfer (BOT) model and decentralisation of electricity market especially in the hydroelectricity sector (Başkan, 2011 and Gökdemir, Kömürcü and Evcimen, 2012). In the five-year-plans covering the 1990s, the main stresses on the energy policies were Turkey's increasing energy needs due to its 'increasing population and growing economy' (DPT, 1989; DPT, 1995: 137). The country needed to provide for these needs with the lowest costs possible, which encouraged the use of national energy sources, private sector for the energy investments, and prioritised the electricity generation from renewables, mainly hydroelectricity (DPT, 1989; DPT, 1995). Accordingly, 1991 marks a significant period for

Turkish hydroelectricity history. Since then, the BOT has started to be used for the construction of small-scale HPPs. The Turkish Government, through the DSİ, has sought for the support of the credit organisations and foreign governments for the construction of hydroelectricity power plants and dams (DPT, 1995; Gökdemir, Kömürcü and Evcimen, 2012). Progress did not meet expectations mentioned in the seventh-five-year-development plan, however (DPT, 1995; Gökdemir, Kömürcü and Evcimen, 2012). This highlights how neoliberal notions have been integrated into Turkey's hydroelectricity policies while demonstrating the DSİ's and state's active roles in credit seeking and construction processes. It also emphasises their roles in the country's economic development and social progress, along with the nation's modernist agenda. This is in contrast to their anticipated diminishing role as a result of the neoliberal reforms in the 1990s.

Turkey witnessed the one of the most severe economic crises in the republican history in 2001, which eventually led to the early elections and the formation of the first one-party government since the DP's rule under the Justice and Development Party (JDP) headed by Recep Tayyip Erdoğan. The JDP was established on the legacies of the 90's WP, and its founders, including Erdoğan, have described itself as 'conservative democrats' by explicitly emphasising the religious motives in their rhetoric and policies. The JDP has arguably brought the political stability to the country since their decisive win in 2002 election, which has steadily increased in the following elections held in the 2000s, which still keeps them as the one-party government in Turkey. Furthermore, the JDP rule in the 2000s also has accelerated the economic growth of the country, while enabling further neoliberalisation of the country (see Çınar, 2006; Tür, 2011; Öniş, 2012). This was mainly achieved through restructuring the economy, accelerating the privatisation process and attracting foreign investors to the country (Öniş, 2012), which were also extended towards Turkish water politics. Another important characteristic of the Erdoğan's rule is the ever-increasing impacts of the EU on Turkish domestic politics in this restructuring process (see Çınar, 2006; Öniş and Yılmaz, 2009). Turkey was officially recognised as an EU-candidate in 1999, leading to the initiation of the official negotiation process for its accession to the Union in 2005 (Çınar, 2006). Such efforts, showing Turkey's determination to integrate with the global system and be part of EU in line with the long-lasting modernist dreams, have resulted in the use of market approach in water management, as seen in the HPP case of Turkey (Şen, 2011). Thus, in the 2000s, Turkey's water and hydroelectricity policies were centred on 'the assurance of

liberalization and privatization activities', which have recently led to the development of small-scale HPPs in Turkey (Şen, 2011: 78).

To summarise, Turkey's water politics between 1980 and 2001 were shaped mainly through the promotion of neoliberal economic and political reforms. Attempts were made to decentralise the country's highly centralised water management scheme; the state's role in water management has been arguably diminished; and the private sector has been allowed to become involved in water management along with the global trends. Water, in this case, has had a vital role in the neoliberalisation of Turkey, given that electricity market was among the first sectors of privatisation, which has been largely utilised in water management. The modernist agenda of the country has not been abandoned in this process, however. Despite the paradigm shift experienced in Turkey's water politics since the 1980s, the modernist agenda and ideology has remained at the backbone of the water management in planning, operating and financing hydro-constructions, while mediating water as a means of socio-economic development and geographical change.

### 5.4 Water Politics in Turkey and HPPs: Reassigning the Role of Water in Economic Development, Social Progress and Changing Landscapes (2001-onwards)

In the 2000s, Turkish water management was characterised by the spread of hydro-constructions in different scales such as HPPs, ponds, large-scale dams like Ilısu, inter-basin water transfers and rehabilitation of streams and rivers (DSİ, 2014). Among these, specific attention is given to the HPPs since they are the main subject of this research. This period represents an interesting case, demonstrating a notable blend of neoliberalism and modernisation in shaping Turkey's water policies (Harris and Islar, 2013). Although the policies and practices were shaped through the neoliberal ideology, their implementation and justification largely relied on Turkey's modernist agenda, despite Erdoğan's and his colleagues' anti-modernist political and ideological campaigns (see Chapter 9 for details).

Since 2001, with the enactment of Law No. 4628, on the Electricity Market, Turkish governments have enabled private initiatives to take over the control of energy resources, including water, to generate electricity for periods between 10 and 49 years in length. This law basically outlines the reforms of the electricity market, along with neoliberal notions.

This phase has led Turkish governments to promote multiple small-scale hydro-constructions at the expense of large-scale ones (although a few iconic projects have been planned and implemented). For example, especially since 2001, through further legislative changes and incentives for private initiatives, Turkish Governments have been planning to build around 2,000 small-scale HPPs and dams before 2023 (Islar, 2012a; see Figure 5.1).

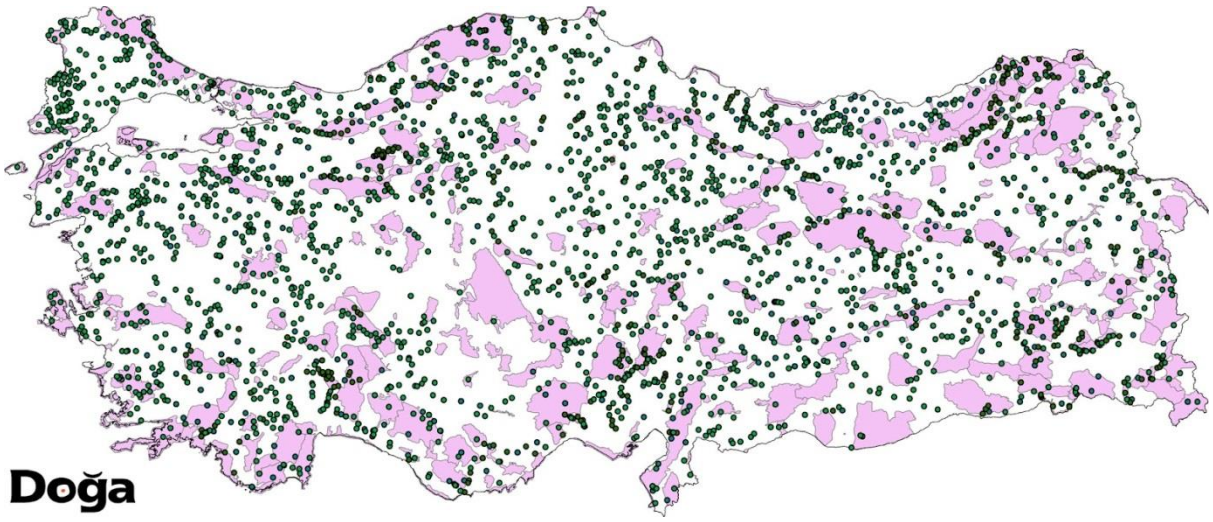


**Figure 5.1:** Map of Turkey's HPPs. Green dots indicates planned/implemented/under-construction HPPs while pink shaded areas refer to Turkey's important nature areas as of 2011. (Reprinted with the permission of Doğa Derneği; see CounterCurrent, 2011 for the original publication.)

As of October 2014, there were 1528 approved HPP projects (DSİ, 2014, personal communication). According to the same document, since the legislation change, 488 of these have been completed, while 144 others are under construction. Harris and Islar (2013) predict that when all of these small-scale HPP projects are completed, they are expected to produce 3% of electricity of Turkey, while DSİ (2014, personal communication) calculates this contribution as 8%.

These small-scale HPPs are planned to be in the form of run-of-the-river types, which divert water from a point closer to source point of the river (which has an appropriate altitude) through canals or pipes to the powerhouse to generate electricity, and releases the processed water to the riverbed from the water house (Abbasi and Abbasi, 2011). This process does not require the constructions of huge reservoirs, and it does not involve the storage of large amounts of water (as large dams do) (Abbasi and Abbasi, 2011). As a result, this type of

hydropower development is generally thought of as having minor environmental impacts (see Bakış and Demirbaş, 2004). Despite their environmentally friendly credentials, considering that up to 2000 individual HPPs have been planned, their cumulative socio-ecological impacts are overlooked in the planning (Islar, 2012a). The operation of this policy-process has subsequently become one of the main motivations behind local social movements against the constructions of these HPPs (see Hamsici, 2010; Islar, 2012a for various examples of local movements).

Before delving into the local socio-environmental implications of HPP constructions, it is important to see how global trends in global climate change regimes and the European Union's relations with Turkey have impacted on Turkey's HPP process. First of all, the global climate change regime, essentially under the Kyoto Protocol, has created new markets for carbon reduction. This has introduced new regulatory mechanisms by prioritising market solutions that combat climate change (Erensu, 2013). By becoming part of this regime as a developing country[20], Turkey also has been able to claim benefits from the market mechanisms of the Kyoto Protocol (Kaygusuz and Arsel, 2005; also Interviewee 1, 2012; Interviewee 36, 2012)[21].

Water has had a significant role in Turkey's adaptation to the Kyoto regime. Accordingly, legislation changes related to HPPs have been amended, and hydroelectricity market has become more attractive for both foreign and domestic investors, since hydroelectricity generation is considered as renewable energy (Eberlein and Heeb, 2011). For example, after Turkey became part of the UNFCCC regime in 2004, the Law on the Renewables was enacted in Turkey in 2005, which provided purchase guarantees for hydroelectricity producers by the state. This legislation has also accelerated the implementation of HPP

[20] Turkey has been hesitant to ratify the Kyoto Protocol and be part of the global climate change regime due to its categorical problem with the Kyoto regime (Interviewee 1; Interviewee 5). As a member of OECD, Turkey was supposed to be named under Annex I countries, which represent developed countries with emission targets, however, Turkey demanded an exception in this classification due to the fact that Turkey is economically not as developed as the other Annex I countries (Interviewee 1; Interviewee 5). When this exception was granted, Turkey became part of United Nations Framework Convention on Climate Change (UNFCCC) in 2004, and it ratified Kyoto Protocol in 2009.

[21] There are three flexibility mechanisms of the Kyoto Protocol namely, Emissions Trading, Clean Development Mechanism and Joint Implementation, which refer to the use of free market tools in international climate change politics. The Clean Development Mechanism basically enables developed countries to invest green projects in developing countries, to comply with their carbon emissions quota, allowed by the Protocol. Starting from this chapter, this fact will be referred, to explain the Turkish case of HPP development.

projects in Turkey. Interviewee 1 clarifies this relation between Kyoto regime and Turkey's HPP policies as follows:

> 'This [spread of HPPs after 2005] is related to the processes of global climate change. The World Bank incremented its support to clean energy, green energy, which includes hydroelectricity as well. This has led Turkey to canalise investments in this sector.'

In this respect, global credit organisations like the WB and IMF have significant roles in supervision of the process. They expand the carbon markets towards developing countries, which is strongly tied with the neoliberal ideology. Turkey's relation with the World Bank after its accession to Kyoto regime is illustrated as an example at this point. Turkey became one of the first countries supported by the World Bank Climate Investment Funds under Clean Technology Fund (CTF), which was established to facilitate the WB's role 'in providing climate finance for developing and middle-income countries' (Eberlein and Heeb, 2011:5). It has loaned $600 million to Turkey to: enhance its renewable energy sector, reduce its carbon emissions, and open up new markets for renewables (Eberlein and Heeb, 2011). Although the loans were provided to support the spread of the renewable market in Turkey, these credits were allocated disproportionately in favour of energy efficiency projects (26 out of 62 projects supported) and small-scale HPP projects (30 out of 62) (Eberlein and Heeb, 2011). Eberlein and Heeb (2011) conclude that this scheme has not achieved the objective of creating a renewable market in Turkey, but it has only empowered the existing hydroelectricity market (see also Islar, 2012a; Erensu, 2013). In the end, through such funding schemes, global credit organisations contribute to the spread of the HPPs in Turkey, within the scope provided by international agreements. This is especially true of the Kyoto Protocol, in the name of combatting climate change and improving the renewable energy market.

Turkey's relations with the European Union (EU) provide another dimension to explain the reflections of neoliberalism on Turkey's HPP policies (see Harris and Islar, 2013). Turkey, as a country that has been in accession negotiations since 2005, has to fulfil 'so-called Copenhagen Criteria', through which candidate countries are expected to harmonise their national structures with the EU's by 'guaranteeing democracy, the rule of law, human rights, and minority rights', ensuring the functioning of the free market economy and competition and fulfilling 'all obligations of EU membership' to be full member of the Union

(Scheumann, Kibaroğlu and Kramer, 2011: xxvi). In this process, countries officially negotiating for EU membership are obliged to introduce legislative reforms and ensure their implementation on 35 broad policy domains listed in the EU's *acquis communautaire*. These include energy and the environment. Turkey needs to ensure the implementation of these liberal notions to its domestic structure to complete its EU membership process, and this has had a significant impact on Turkey's energy and environmental policies in the last decade (Harris and Islar, 2013).

To this end, Turkish governments have enacted a series of legislations and have introduced several reforms on energy and environment in the last decade to meet the so-called Copenhagen Criteria. These have eventually integrated neoliberalism ideologically and practically into Turkey's energy and environmental policies. Legislative changes and reforms, upheld by Turkey's EU accession bid, have restructured Turkey's natural resources management schemes and created a competitive energy market, especially its water resources management and hydropower sector. This is in line with neoliberal mechanisms such as decentralisation, which has altered the state's role from being provider to regulator; [22] and, privatisation, which has aimed to attract foreign investment in the country (Harris and Islar, 2013). In addition, as Şirin and Ege (2012) and Kentel and Alp (2013) evaluate, legislative changes and reforms on renewable energy (encouraged by the EU) require Turkey to politically commit itself to increase the share of renewable energy in its energy generation, create renewable energy markets and develop technology for renewables. Change has mostly occurred in the hydropower sector (see Eberlein and Heeb, 2011). In this sense, the HPP phase is a part of the promotion of renewable energy sources in Turkey, and it reflects neoliberal notions such as decentralisation and privatisation of water resources management, which have been pushed by the EU as a part of Turkey's accession negotiations in the name of ensuring a free market economy and a competitive energy market in Turkey (Şen, 2011).

[22] Turkey's energy policies and natural resources management has been traditionally shaped by statist policies, in which the state was considered as the main actor to manage natural resources for economic development and provide these services to the public in line with the modernisation ideology of the Turkish Republic (see Adaman, Akbulut and Arsel (forthcoming) for further information). In terms of water resources management, especially during the 1970s, State Hydraulic Works (DSİ as Turkish acronym) was responsible for building large-scale hydroelectric power plants and irrigation schemes (Kibaroğlu, Başkan and Alp, 2009). With the spread of neoliberal ideology towards Turkey, currently, DSİ involves in the hydropower and irrigation sector, but its main responsibility in this process is to regulate the market rather than being the main provider of these services, which points to the decentralisation of its duties (Islar and Harris, 2013).

Legislations and amendments introduced after 2001 exemplify these reflections, which have resulted in HPP constructions. According to Kaya (2006), the 2001 Law on Electricity Market, which aimed to ensure competitiveness and free market notions in the energy sector in Turkey, was issued to adjust Turkey's legislation and energy market to the EU. This law is perceived as being the beginning of the spread of small-scale HPPs in Turkey. Furthermore, the 2005 Law on Renewable Energy has introduced mechanisms like expropriation of commons and purchase guarantees to attract private investments in the country's renewable sector (Barış and Küçükali, 2012). Immediately after the enactment of this law, in one year from 2006 to 2007, it is estimated that hydroelectric power plant constructions, especially in the form of small-scale HPPs were increased by four times. The number of planned HPPs doubled for the same period (Barış and Küçükali, 2012: 390). All such legislations and policies aiming to comply with the EU's structure have led European companies to take active parts in the HPP construction processes. Interviewee 1, Interviewee 5 and Interviewee 30 confirm that European companies, especially ones from Austria and France, actively get involved in the HPP construction process, generally by using the Turkish companies as their sub-contractors. Relevant to this, the role of European funding mechanisms in HPP development phase has to be mentioned. For example, the European Investment Bank (EIB) loaned €135 million in funding to support eight hydroelectric power plants, a mixture of small-scale HPPs and large dams in the Southeast Turkey, which were prepared by a Turkish company and an Austrian company in 2008 (EIB, 2008).

These neoliberal politics and influences are not the only drivers of the HPP process in Turkey. Modernisation still has a vital role in shaping these policies, especially in their justifications. A brief analysis of the rhetoric frequently used by policy-makers demonstrates how a modernist agenda is still embedded in the HPP process, and how water and water politics are key in achieving the country's modernist goals. In Turkey's recent HPP processes, state officials frequently use the rhetoric of 'flowing water in vain', as inherited by the modernist understanding of the early republican period, seen in the five-year-development plans of DPT (see Erdoğan, *Milliyet*, 2005a; *The Guardian*, 2011). Through this rhetoric, they underline how water and water politics are key in generating electricity to support the country's economic development. Accordingly, water that is not being harnessed for hydroelectricity, is perceived as a loss in terms of energy production and economic means (see, for example,

Eroğlu, *Radikal*, 2009, when he provides monetary value of the water flowing to the sea 'in vain').

Officials frequently refer to the idiom of 'water flows, Turk watches' in the HPP process, when promoting the constructions (Yıldız, *Radikal*, 2010). Infused by the ideology of modernisation, national pride and patriotism, officials claim that they changed the global understanding of 'water flows, Turk watches' to 'water flows, Turk constructs'. This has been achieved through the recent HPP phase, which further emphasises the continuity in the Turkish modernist vision, regardless of the political orientations of the governments. This hints at the Turks' ability to 'construct' and holds mastery over the nature (see Erdoğan, *Hürriyet*, 2012). In addition, Turkey's undeniable energy dependency, along with the necessity to generate national energy to support economic growth, have both been frequently used in this discursive construction process of Turkish water politics since the first-five-year-plan of the DPT. This peaked during the introduction of the GAP, and still actively applied in the recent HPP phase. For example, the two high-ranked DSİ officials in Ankara (Group Interview 7) stated when they supported the widespread small-scale HPP development projects of Turkey, that these constructions and electricity generation from 'national resources' are 'essential' and 'all the nation's hydroelectricity potential should have been harnessed in the past' for the sake of the 'economic development' and 'decreasing the energy dependency of the country'.

The HPP process reaffirms the continuation of the centralised and technocratic water governance tradition in Turkey. During the interviews undertaken with the DSİ officials in May and November 2014, it was observed that the attitude in conceiving water governance centres on the ideas that 'DSİ knows the best about water' and 'if DSİ approves a [water] project, it means it is [socially, economically and ecologically] appropriate'. For instance, two high-ranked DSİ officials (Group Interview 7) in Ankara and two others in the local branch of Fethiye (Interviewee 6 and 28) unanimously dismissed a question on the potential benefits of local knowledge in water governance by asserting that locals are 'not competent' to be involved in those issues. Similar sentiments can be found elsewhere in Mine Islar's (2012b) analysis on Turkey's water governance, where she shows that dominant actors of water governance (state officials and company representatives) consider locals as 'illiterate'. Local interests and recommendations are devalued without doubt (Islar, 2012b). Such

examples demonstrate that expert- and technology-orientation remains key in the HPP process.

Politicians and bureaucrats, even private sector representatives, still utilise assumptions behind the modernist agenda of Turkey and ideology when promoting and justifying such governance practices and policies. They use technical and expert-oriented governance models based on the scarcity of natural resources and overpopulation assumptions (Robbins, 2012). For example, Interviewee 31, a high-level company representative, when justifying his company's engagement with the hydroelectricity market of Turkey, indicated that

> 'they [opponents of the hydroelectricity power plants] say 'we do not need energy'. Really? Then, exterminate the half of the world population. As long as we have these population trends, we will need energy.'

The preface of a recent governmental document, DSİ's Activity Report of 2013, released in 2014, an important source summarising the most recent water governance practices published by the key official water governance institution of Turkey, provides further evidence. In this, the Minister's preface starts with a briefing about how water is a scarce source and how it should be utilised carefully through science and technology (DSİ, 2014), as well as listing the numerical presentation of the institution's 'success' in the completion of a series of hydro-constructions. The preface also presents significant demographic data, which draws attention to the number of people who do not have access to water and sanitation services globally (DSİ, 2014). The preface by the Director General, on the other hand, mostly focusses on how water is vital to achieving socio-economic development. He then details how many hydro-constructions the DSİ has completed with the help of the private sector, while celebrating more upcoming constructions (DSİ, 2014). These examples clearly reinforce a view of the infusion of modernist notions in Turkey's water governance. In short, it can be summarised that modernist notions have been embedded in Turkey's water governance practices since the early periods of the Republican regime, instances of which are still discernible at the administrative and political level. Expert- and technology-oriented, centralised and economic development- and social progress-driven water governance practices are widely implemented, which also produce Turkey's waterscape.

When examining the implementations of the HPPs at different localities, socio-environmental transformations may become visible at the local scale. These help to solidify

a broader socio-natural production of the Turkish landscape. In other words, the private companies and the state have not managed the HPP process in Turkey properly. As a consequence, socio-ecological, cultural, and economic impacts of these constructions on local populations have become problematic in Turkish politics. Each HPP case in Turkey represents peculiar socio-spatial transformations shaped by peculiar historical and geographical processes. These transformations, centring on public reactions, can be exemplified by way of individual HPP experiences. For example, Turkey's eastern Black Sea region hosted the majority of the HPP constructions, and socio-ecological impacts are observed in various localities (Hamsici, 2010). One spokesperson from an anti-HPP NGO from Rize province observed that local people are denied access to water; that their living spaces and their environment are constrained and damaged; and that their historical, social, and cultural values are irreversibly impaired as a result of the HPP constructions (NTVMSNBC, 2010). In another example from the Black Sea region, in the Kabaca Valley in Artvin, six HPP constructions have led to numerous environmental problems, such as land degradation, soil erosion, loss of vegetation, decreasing water quality, and socio-economic issues such as displacements and loss of livelihoods, threatening the presence of local cultures (Kurdoğlu, 2014).

In Tortum, Erzurum in eastern Anatolia, opposition to the HPPs has intensified with the projects' visible environmental impacts, such as excavations, soil degradation and the related potential socio-economic and ecological impacts. In this case, local people ultimately achieved a massive level of mobilisation, and subsequently experienced violent suppression attempts by the security forces, paving the way for one of the most controversial court decisions against HPP protesters in Turkey (Kurtiç, 2014). In the Munzur Valley, located in the eastern Anatolian region, which is also a national park and mainly provides homelands for religious and ethnic minority populations, local people from Alaouite and Kurdish origins prioritise the cultural-religious importance of the stream (Hamsici, 2010). Locals reported that the decreasing water flow as a result of HPP constructions caused an unbearable smell and riverbed pollution, preventing them from fulfilling their religious practices and interrupting their social life (Hamsici, 2010). This is the main factor fuelling their opposition to the HPP constructions at Munzur, in addition to their concerns about the destruction of the environment and their agricultural lands (Hamsici, 2010). Furthermore, there are also incidents in the Ergene river basin in eastern Thrace, demonstrating the impacts of HPP

construction on the nomadic people living there, known as *Yörük*s. Due to the constructions, their routes were blocked, and water availability decreased in Ergene, impacting on the practice of their socio-economic and cultural activities (CounterCurrent, 2011). The nomads were forced to abandon their traditional lifestyle and settle in Karaman in Central Anatolia, reportedly causing adaptation problems and psychological issues among these groups (CounterCurrent, 2011).

These individual stories relevant to Turkey's HPP process depict the reflections of the recent phase of Turkey's water management, as well as exemplifying socio-environmental inequalities falling under the environmental justice framework. This will be analysed in this research. As the chapter has demonstrated so far, the reasons for the emergence of such inequalities can be straightforwardly attributed to the HPPs themselves. The deep causes of these incidents, however, are the result of Turkey's long-lasting modernist agenda and its influence on Turkey's water politics, which has led to the formation of the HPPs, as constructed throughout this chapter. These influences will be elaborated in the following chapters when presenting the results.

## 5.5 Conclusion

This chapter explored Turkey's water politics within a historical perspective, based on Turkey's modernisation process. That is to say, this chapter illustrated how socio-environmental transformations and inequalities experienced recently trace back, and how they present a culmination of the complex web of relations and processes. These complex processes including but not limited to simultaneous interplays between ideological, discursive, technological, social, political, economic and natural aspects, reveal the socio-natural characteristics of water (see Chapter 2). They also document the production of Turkey's waterscape, and show how current policies including HPPs have been conceived.

Modernisation ideology and Turkey's modernisation process have played a central role in shaping the country's water politics and its perception of water, while water politics have also been supporting this ambitious agenda. It is this process that has mobilised water as: a means of economic development, a social transformation, power consolidation, an indication of national pride and a manifestation of human mastery over the nature, in realisation of the

country's pervasive (and long-lasting) modernist agenda (see Scott, 1998; Kaika, 2005 and Peet and Hartwick, 2009). Even when neoliberal policies and global trends have begun to influence Turkish water management, this modernist agenda and modernisation have not been completely abandoned; instead they have been further reinforced. In light of this analysis, it could be claimed that the current socio-environmental transformations bound to the HPPs have been caused by the modernist mentality embedded in Turkish water management, which prioritised hydro-constructions planned and implemented by a technocratic approach to attain economic and social development. Thus, the modernisation process of Turkey and modernist ideology can explain as the deep causes of the socio-environmental inequalities bound to HPPs.

Such a perspective (and claim) is vital for this research because it enables a broader analysis in addressing the roots of current socio-environmental problems. Building on this, this research claims that as long as the perception of water (and conventional ways of water policy-making infused by modernisation) remains in Turkey's political agenda, such problems and/or inequalities will be experienced either through HPPs or through something else. Thus while aiming to addressing such issues, Turkey's modernisation process and modernist ideology should be thoroughly reconsidered, since they are the main reasons of creation of these policies. Accordingly, the next three chapters comprehensively reveal the socio-environmental transformations and inequalities bound to the HPPs, within the context of environmental justice in the Western Mediterranean Province of Turkey. This analysis will support this chapter by deepening the empirical side of the story. Following these analyses, this chapter will be revisited in Chapter 9 which discusses field results through the process elaborated here to formulate the policy recommendations and contribute to the conceptual framework of environmental justice.

# CHAPTER 6: EVIDENCE I: ENVIRONMENTAL JUSTICE AS DISTRIBUTION AND HPP CASES OF WESTERN MEDITERRENEAN PROVINCE

## 6.1 Introduction

Building on the process of Turkey's water policies and how they have led to the formation of the current HPPs, the next three chapters present 'evidence' for the socio-environmental (in)equalities HPPs caused. These chapters analyse empirical HPP cases following David Schlosberg's (2004, 2007, 2013) understanding of trivalent environmental justice presented in Chapter 3. Accordingly, HPP implementations/attempts on four case study areas (Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay) of the Western Mediterranean Province of Turkey and subsequent public reactions are evaluated in terms of their distributive, recognitional and participative (procedural) dimensions of environmental justice to complement the making of environmental justice claims.

Before bringing the results of the field studies into greater focus within those three dimensions of environmental justice, it is important to clarify a point here: The following three chapters **only** present the field data through categorising the results within the patterns introduced by the environmental justice literature. However, as will be seen in the following chapters, while existing patterns are relevant to such a claim-making, they cannot be applied as certain ones would become irrelevant to this analysis and/or significant patterns would be overlooked in the literature mainly due to the contextual nature of such issues. In that sense, the next three chapters follow the footsteps introduced in Chapter 3. Further, the overlooked and highly relevant patterns revealed in this research will be discussed in Chapter 9, which is expected to contribute to the conceptual formation of environmental justice.

In line with this information, this chapter focusses on the distributive dimensions of environmental justice in Turkey's HPP process based on the analysis of local implications of HPPs and subsequent public reactions in the Western Mediterranean Province. As indicated earlier, distributive aspects are generally considered as the core of the justice studies, including environmental justice. Since the early conceptions of environmental justice, there has been a tendency in conventional Western-focussed environmental justice studies to merely analyse the distribution of environmental benefits and burdens across the society by focussing on the final outcomes of the environmental policy-making processes. However,

application of a framework only focussing on this pattern would mask the socio-environmental issues that emerged during the HPP process in the case areas. Should this research sticks in the quest of the distribution of environmental burdens and benefits as the majority of the environmental justice literature, it becomes only relevant to the one out of four cases analysed in this research, Söğütlüdere case, where the HPP had been constructed. It does not mean that there were no distributive dimensions of environmental justice in the other case areas despite the fact that the constructions were cancelled/avoided through social movements and legal processes. This chapter therefore presents the field results with the more comprehensive distributive environmental justice framework argued in mind, extending the distributive aspects of the concept.

The next section classifies the field data in accordance with the highlighted patterns of environmental justice, starting with the ***distribution of environmental burdens and benefits*** at the case study areas during and after HPP processes. The issue of the ***distribution of environmental risks*** is also briefly focussed. It is followed by the investigation of the ***distribution of vulnerabilities*** of the local communities in the case study areas, pointing to the role of the existing weaknesses and HPPs' potential impacts on those vulnerabilities. The fourth section discusses the question of beneficiaries and burden-bearers of the HPPs in the case study areas by focussing on the analysis of the ***distribution of responsibilities***. In all these sections, distributive aspects of ecological justice in the case areas are also embedded in the presentation of the field results. In the end, this chapter aims to uncover the major socio-environmental issues experienced in the HPP processes in the Western Mediterranean Province, which will also be referred to frequently in the analyses of the following two dimensions of the environmental justice.

## 6.2 Distribution of Environmental Benefits and Burdens/Environmental Risks

### 6.2.1 Distribution of Environmental Benefits and Burdens/Environmental Risks in Turkey's HPP Process

There is an ongoing debate at the academic and activist level on the adverse social and environmental impacts of large-scale hydro-constructions, which are notably discussed in the World Commission on Dam's Report (WCD, 2000) and McCully (2001), for instance. Those impacts, ranging from habitat alteration and destruction, deforestation, sedimentation and greenhouse effects to the resettlement of human populations are still debated on multiple scales. Here, those socio-environmental impacts of large-scale constructions will not be duplicated; rather, studies concentrating on the impacts of small-scale HPPs are prioritised.

As Abbasi and Abbasi (2011) claim, current trends in hydropower business revolve around the small-scale HPP constructions, since they are promoted as clean, environment-friendly and sustainable alternatives to fossil sources and large-scale projects. Yet, they also show that such a depiction would be misleading due to their generally-neglected socio-environmental impacts. As a departure point, the advantages and disadvantages of small-scale HPPs will be briefly introduced below since they constitute the benefits and burdens felt disproportionately by the different segments of society, as well as the nature itself, in the case study areas. Later, Turkish scholars' works supporting and confronting the country's HPP scheme, depending on their advantages and disadvantages, are briefly introduced to demonstrate how the socio-environmental impacts are perceived at the academic level that is also widely represented at the political level. The last part of this sub-section introduces the impacts and potential impacts of the HPPs in the case study areas. Here, it should be distinguished that the word 'potential' is intentionally used, since only one of the four cases has resulted in the HPP construction and the rest of the cases cancelled due to public opposition/legal process based on HPPs' potential socio-environmental impacts also including their potential disproportionate distribution.

Firstly, it is necessary to succinctly illustrate the positivities associated to the small-scale HPPs. International Energy Agency (2000:17) introduces that small-scale HPPs and their socio-environmental impacts 'will tend to be less significant than reservoir project'. The Agency, in the same report, promotes small-scale HPP constructions, based on the following assumptions: that they do not alter the environment and water flow significantly; they do not

cause large-scale human displacements and flooding incidents; and they protect aquatic biodiversity and wildlife by allowing a minimum flow available at all times and building fish passages in the original riverbed. Furthermore, as Burton and Hubacek (2007) argue, the preference for small-scale HPPs over large-scale projects contributes to climate change mitigation and carbon reduction targets, due to their clean and environment-friendly depiction. HPPs also diversify the energy supply. In support of this point, Kosnik (2010) argues that HPPs decentralises electricity generation, as they generate electricity that is likely to be consumed at the local level, whilst also stressing that they do not release air pollutants. Elsewhere, Adhau, Moharil and Adhau (2012) and Ahmad and Tahar (2014) acknowledge the local contributions of HPP constructions, especially concerning the creation of job opportunities around the construction sites. Hence, such socio-environmental positivities lead to the promotion of small-scale HPP constructions at the global level.

In contrast to these optimistic views on small-scale HPPs, recent publications have raised strong reservations against their clean and environment-friendly depiction, while also focussing on their social impacts. Scholars such as Abbasi and Abbasi (2011), Premalatha et al (2014) and Anderson et al (2014) have provided general overviews on the socio-environmental impacts of the small-scale HPPs, and some scholars have used case studies and empirical evidence to demonstrating these socio-environmental impacts (see Reddy et al, 2006 on India's small-scale HPPs; Islar, 2012a and Erensu, 2013 on Turkey's; and Brocken, Bulkeley and Maynard, 2014 on UK's). Among these scholars, Abbasi and Abbasi (2011) remind that the large-scale hydro development schemes were once portrayed as clean and environment-friendly, which were later discouraged due to their adverse socio-environmental impacts as also explored by the WCD Report (2000). Abbasi and Abbasi (2011:2139) maintain that the global trends and national agendas promoting small-scale HPPs have a similar optimism to that experienced in the promotion of large-scale constructions, yet

> '[n]o scientific basis is given for the belief [that small-scale HPPs are clean and environment-friendly]; the only apparent logic behind the presupposition is that since an SHS [authors' abbreviation for HPP] is a 'small-scale' system, adverse impacts it may cause will also be proportionately small'.

Grounded on this logic, sceptical voices against small-scale HPPs highlight that there is no reason to presume that HPPs would not cause the similar socio-environmental problems to those caused by large-scale schemes. For example, these scholars have listed a series of

environmental problems stemming from HPP constructions, including their depletion of water flow, their particular impact on aquatic biodiversity and wildlife surrounding the watershed, their disturbance of rivers' connectivity and the cumulative impacts of multi-HPP constructions on a basin. These are especially damaging to on sensitive ecosystems, deforestation and pollution (particularly seen at the construction phase) (see Anderson et al, 2014 and Premalatha et al, 2014).

In addition, there are authors specifically focussing on HPPs' social impacts. For instance, Brocken, Bulkeley and Maynard (2014) explore the idea that small-scale HPPs detriment recreational activities and economic activities such as irrigation and fishing, due to their impacts on water flow and river connectivity. Abbasi and Abbasi (2011) also note that HPPs often jeopardise customary practices through dispossessing locals from land and water, which may eventually lead to the socio-economic deterioration of local communities. In other words, as Reddy et al (2006) highlight the construction process, for which the rhetoric promises local empowerment through HPPs, sometimes has the opposite impact on local communities by deteriorating the existing socio-economic statuses of relevant localities. Above all, the socio-environmental impacts of HPPs are affiliated with public unrest due to their disturbance of locals' daily practices, which have been recently analysed by Islar (2012a, 2012b) and Erensu (2013) for Turkish HPP cases.

As for Turkey's small-scale HPPs, and their socio-environmental impacts (or advantages and disadvantages), there are sharp divisions between proponents and opponents of them at the political, academic and social levels. As argued previously, politicians, bureaucrats and private sector actors (see Interviewee 31) have attempted to justify HPP constructions through highlighting their role in decreasing Turkey's energy dependency. Moreover, these declarations are also uttered by local populations especially by those who support the ruling party (personal observation during the field study, see Group Interview 5). They frequently refer to Turkey's rapid economic growth and its increasing energy needs, while also listing the advantages of HPPs in the increasing country's share in renewable energy production. They also highlight the HPPs' contribution to sustainability goals associated to the EU accession process and compliance with the Kyoto targets (see Chapter 5). These political and ideology-driven depictions of HPPs have been also backed by academics. Publications such as Yüksek et al (2006), Yüksel (2008), Kömürcü and Akpınar (2010), Dursun and Gökçol (2011) and Çapık, Yılmaz and Çavuşoğlu (2014) repeat these arguments, presenting

statistical information on Turkey's hydropower potential, its energy dependency, economic growth and population projections. In these works, which do not include any sort of environmental and/or social assessment, the necessity of more HPP constructions for Turkey is argued, based on their clean, environment-friendly, sustainable, domestic and lucrative depictions. The only negatives that are touched on are their impacts on fish populations (see Yüksel, 2008). Instead, these studies highlight their contributions to the local economy, such as increasing local electricity generation, creating job opportunities, and improving education and social life at the HPP localities. They are presented without any empirical and statistical data or any extensive ethnographic data (see, for instance, Çapık, Yılmaz and Çavuşoğlu, 2014).

Opponents of small-scale HPPs in Turkey focus on the socio-environmental changes originating from HPP constructions at the local level. In general, Turkey's HPP phase is confronted due to HPPs' environmental impacts like a lack of sufficient environmental assessments, unplanned implementations of multiple HPPs on the same basin, habitat destruction, pollution from construction, decrease in fish and wildlife populations, inadequacy of the provision of minimum flow, poor monitoring standards and change in water flow. These confrontations occur at the political level (see Interviewee 5), organisational level (see TMMOB, 2011) and academic level (see Başkaya, Başkaya and Sarı, 2011; Şirin and Ege, 2012; Küçükali, 2014; and Adaman, Akbulut and Arsel, forthcoming). Moreover, these studies, and the ones like Hamsici (2010) and Islar (2012a, 2012b), significantly highlight the overreliance of local populations on these small rivers for their basic socio-economic activities. Activities such as small-scale fishing, subsistence agriculture and irrigation are jeopardised through changing ownership which limits/alters their utilisation from/access to those sources, and causes the environmental impacts listed above. As also underlined in this research, opponents emphasise that their socio-environmental impacts are not as small and negligible as suggested by the proponents of HPPs, by concentrating on the socio-environmental changes caused by their constructions and the subsequent public reactions against them.

In line with these advantages and disadvantages of HPPs argued respectively by proponents and opponents, the distribution of environmental benefits, burdens and risks can be analysed for each HPP case of this research, both for the people and nature. Among these, the analysis of the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases are mainly conceptualised as

potential environmental benefits and burdens/environmental risks, since these HPPs were cancelled due to public opposition and subsequent court decisions. In the Söğütlüdere case, these issues can be discussed as environmental benefits and burdens because this case represents the only HPP that has been constructed and is operating among the case studies of this research. This presentation is still limited, however, due to the fact that the HPP had only just started to operate by the time of field visit.

### 6.2.2 Saklıkent HPP and Distribution of Environmental Benefits and Burdens/Risks

As described by Öngür (2011), the Saklıkent HPP is around 13 kilometres in length, and includes the creation of two artificial lakes, which are expected to cover 1 $km^2$. The project includes the construction of a regulator on the stream, behind which the first lake is located (Öngür, 2011). The aim is that water will be carried away from this lake through a nine-kilometre-long-closed canal to a point where the altitude is high enough for the water to be dropped to the turbine to generate electricity. After this treatment, the water will be planned to be released back to the riverbed, but will then be kept in the second lake, after which the process is repeated. The company operating the Saklıkent HPP withdrew itself from the process due to public opposition (Interviewee 11).

Local perceptions of this HPP and its socio-economic and environmental risks were influential in shaping this process (this is analysed further in Chapter 7). The main advantages of this HPP, as presented by the company and bureaucrats, were its contribution to local energy supply, its indirect contribution to decreasing Turkey's energy dependency and its contribution to rural development, especially through creating job opportunities (see Interviewee 3, 9, 11 and 22; Group Interviews 1, 2, 3 and 4, depending on their own experiences in the EIA meetings conducted in the region, see Chapter 7 and 8 for the details of the EIA process). They only implied minor environmental impacts. As for the local electricity generation, Demir (2011) states that the planned HPP was expected to produce 9.67 MW electricity. Proponents of this HPP, especially the ones interviewed within Group Interviews 2 and 4, clearly indicated that despite all the socio-economic and environmental risks of the HPP, they were happy about the construction, since it was supposed to contribute to the national economy and decrease Turkey's energy dependency. For example, a

proponent of Group Interview 4 underscored Turkey's increasing energy needs, and he pointed out that Turkey should utilise all potential energy sources, including nuclear, to decrease its energy dependency and advance towards the socio-economic levels of developed nations. This opinion can be perceived as the reflection of the official HPP discourse developed at the political and administrative levels on the ordinary citizens (see Chapter 5; the exact same explanation was also provided by Interviewees 6, 28 and 31 and Group Interview 7).

In addition to the local generation of electricity and the reduction of the country's energy dependency, the Saklıkent HPP, as a construction was presented by the company and bureaucrats as having no major socio-environmental impacts. It was introduced to the locals as a tool for rural development. Interviewee 3 and Group Interviews 1, 2, 3 and 4, including HPP proponents, unanimously claimed that the company and bureaucrats emphasised the potential contributions of the HPP to Saklıkent basin (its potential improvement of socio-economic conditions in surrounding villages by increasing employment opportunities) during EIA meetings. In addition, as inferred from Öngür (2011), the company also promised to secure irrigation water and stabilise the water availability for the locals, despite the seasonal variations. However, when locals are asked if there were any guarantees or tangible proposals made by the company, Interviewee 3, for example, described these 'promises' and 'optimism' as 'the fairy tales of commercial contribution, contribution to the village life'. He highlighted significantly that these promises were 'not dependent on any sort of protocols'. In addition, Öngür (2011) demonstrates that the project intended to create a recreational zone by using the excavation materials to fill an area of 228 acres of land, which was introduced as a benefit of the HPP to the basin. However, during the field visits it became apparent that this proposal was not backed by the local communities, since it was not ever referred to by any of them (including HPP proponents). Furthermore, these interviews, especially Group Interview 3, emphasised that the company advocated the HPP construction on the basis of its cleanness, by asserting that 'it would not have any impacts on locals and the environment'. The company remained silent against the questions of locals, who were demanding assurance and tangible explanations on how the potential socio-economic and environmental impacts would be avoided (see Chapter 7 for more information). The same point was repeated in Group Interviews 1 and 4 and Interviewee 3 as well. In general, in spite of the positive depiction of Saklıkent HPP, its potential benefits were not sufficient to wholly convince local

communities on the HPP construction, as seen in their reactions against the construction. This was verified during the field visit.

The environmental risks of Saklıkent HPP can be revealed through the analysis of the critique of the EIA report of the project, conducted by an experienced geological engineer, Öngür (2011). He argued that state institutions, without sufficient evaluation, neglected the potential environmental impacts of the projects. This critique responds to the EIA report by quoting issues and arguing that the environmental risks associated with this HPP are not as negligible as presented by the company (Öngür, 2011). [23]In his comprehensive analysis, Öngür (2011) initially points out that artificial lakes and closed canals would be expected to increase humidity and change the microclimate. This could significantly alter the sensitive ecosystem (the area was once part of the national park, Demir (2011)); destroy soil and flora; and cause erosion. He explains that the constructions are very likely to disturb the reproduction/breeding behaviours of the local wildlife, which is also succinctly stated in the EIA report. He quotes the original report, in which it was underlined that the stream basin hosts 37 endemic plant species, is a forestry area and is the main water source feeding the Saklıkent National Park. It is documented that the basin represents a sensitive ecosystem, since it involves peculiarities attributed to the Mediterranean vegetation while also hosting 16 species of reptiles, 113 species of birds and 27 species of mammals not including migratory species (Öngür, 2011).

Öngür (2011) points out several issues for the construction process, including excavation, pollution, noise and night lighting. The EIA report declared that excavations would be filled to an area of 228 acres, storing 912,720 $m^3$ of material that would be excavated during the construction. Öngür underlines that process would erase around 250 acres of wildlife, while stating that issues like noise, pollution and night-lighting would create extra stress to species in their hunting, breeding, migration and reproduction. Similarly, he also criticises the construction of the closed canal, which would have detrimental effects on the animal population living in the basin, especially on their nourishment from the stream. In addition, it is not only these issues that would stress on the ecosystem; the issue of minimum flow also has serious implications.

[23] Despite my efforts to obtain the EIA report during the field study, I was not successful in those attempts.

The HPP process and water use right agreements between the company and the state require companies to release at least 10 % of the water continuously, for the maintenance of socio-economic and ecological life in the basins (see the 2003 By-Law on Water Use Rights Agreements). Accordingly, this stream's monthly average flow is indicated as 14.9 $m^3/s$, while its minimum flow is determined as 1.65 $m^3/s$ (in September) and maximum is 271 $m^3/s$ (February-March) (Uğur et al, 2013; see also DSİ, 2014). Öngür (2011) reported that the minimum required flow aimed to be released to the riverbed is calculated as 0.2 $m^3/s$ (with 0.2 meters of water depth for this HPP). As a geological engineer, Öngür (2011) argues that this amount was not adequately measured, since the analysts did not specify whether this amount indicates the net flow, after deducing evaporation and infiltration. He maintains that since the evaporation indicators are high in the basin, and since the riverbed is mostly composed of limestone, which is known for its permeability, this minimum flow should count those variables in its indication. Under these circumstances, he highlights that this 0.2 $m^3/s$ minimum flow would not exist in the riverbed. In short, these potential environmental impacts/risks were introduced as 'minor' by the EIA report, which only briefly touched on their impacts. The report, however, was still approved by the relevant ministry (see details about the process in Chapter 8). Above all, Öngür (2011) mainly criticises the EIA report due to its commitment to evaluate the environmental impacts of the project during the construction, not before it. He states that it is a scientifically flawed piece that fails to cover the likely environmental impacts of the Saklıkent HPP.

In conclusion, while the Saklıkent HPP promised to generate local electricity and improve socio-economic conditions for the local community, its benefits were grounded on its contribution to national energy policies and decreasing the country's energy dependency. In this process, as understood through the interviews, the EIA report and its critiques, the HPP was promoted having only minor environmental impacts. However, Öngür (2011) clearly demonstrated that the completion of the project was associated with serious environmental risks, which would jeopardise both the existence of the local community and nature, and their access to water. This will be further elaborated in the following sections of this chapter.

### 6.2.3 Söğütlüdere HPP

The Söğütlüdere HPP, named officially as the Sekiyaka HPP, combines two pre-existing HPP licences (Demir, 2011). According to two documents of the company describing the process (Beyobası Energy, no date, and Güngör, 2010), the project aims to produce 3.4 MW of electricity and it is planned as a run-of-river scheme. The first project, Sekiyaka I, utilises from the regulator once-constructed by DSİ, however, the company was expected to build complementary constructions, such as a transmission tunnel, a canal and a penstock pipe (which would produce 2.3 MW of the electricity) (Güngör, 2010). The second project, Sekiyaka II, required the construction of a small run-of-river scheme with a capacity of 1.09 MW. Güngör (2010) states that the first project will run throughout the year, while the second one will not operate during summers, to provide irrigation water to the local communities. The Gold Standard (2010) indicates that this HPP project would counteract the emission of 8000 tons of $CO_2$ when it starts to operate. Although there were signs of a public opposition by 2010, when the project started to be operationalised, the locals eventually granted their consent for its construction, after a series of negotiations held between the village council and the company (see Interviewees 11, 13 and 31 and Group Interview 5). In the end, this project was completed and it has been in-operation since January 2014.

The social, economic and environmental benefits and burdens of Söğütlüdere HPP and their distribution can be understood through the project's public participation report (Gold Standard, 2010) and evaluations of Interviewees 7, 11 and 31 and Group Interview 5. As for its benefits, the main advantage of the HPP is determined as its contribution to sustainable development and climate change policies of the country, when the process is viewed from the perspective of the company (Gold Standard, 2010). As inferred from the company's public participation meeting for this HPP, despite its exemption due to Turkey's EIA regulations (see Chapter 8), the company attempted to register this HPP (and the electricity it generates) as a clean, to obtain advantage in its global trade. According to the Gold Standard (2010), once companies are qualified for this certification, the electricity produced through their certified power plants can be traded under Kyoto Protocol's carbon trading mechanisms (see also www.goldstandard.org, 2015). Hence electricity and its trade can be considered as one of the main advantages of the HPP for the company, and for the country.

Güngör (2010), The Gold Standard (2010) and Interviewee 31 claimed that this HPP's socio-environmental impacts would be minor, since the project only requires the construction of a small-scale run-of-river scheme. The Gold Standard (2010) underlines that the region is not part of a sensitive ecosystem or environmental protection area. The report specified that since the project intends to use the existing infrastructure, and aims to introduce an underground system of operation, the vegetation and fauna will not be significantly damaged. However, in their analysis, issues like noise and night lighting are evaluated only in terms of its impacts on human population, not on the environment, while the provision of cleaner electricity (than the alternatives) is endorsed. It could be contended that these issues would put pressure on the animal population living around the construction site, as claimed by Öngür (2011) for the Saklıkent case, which was neglected in this process. According to the experts, like Interviewee 7 (who is a former employee of DSİ and against Saklıkent, Kargı-Yanıklar and Yuvarlakçay HPPs due to their relatively less socio-economic benefits and potential environmental hazards), the environmental impacts of the Söğütlüdere case can be regarded as minor, provided the company constructed the facilities as it was described in the project files. He elaborates that

> 'I know the spot [construction yard] very well, since I worked here [in Fethiye] in DSİ for long time…If the project was constructed as we talked [I described the project along with my observations and readings from the company's documents], it should not have caused any problems. On the contrary, it means that a water source is utilised properly…especially on a stony place [confirmed through observation], which has risks including regular flooding [which can be controlled through the HPP].'

As of May 2014, the members of Group Interview 5 stated that they have not experienced any negative effects on the release of minimum flow or irrigation processes. They highlighted that since the project has been in operation since January 2014 (for four months by the time of the field visit), the locals had not felt any actual impacts to minimum flow and water availability. They expect to have clearer comments about the project in the following years (see Group Interview 5). Moreover, during the field visit it was observed that the company cut down several trees during the construction. There was the dusting and pollution experienced during the construction phase of the HPP (confirmed by Interviewee 31). However, Interviewee 31 clarified that the company fulfilled necessary processes to reforest the region after the construction. It was observed that excavation materials were not present in excessive amounts in the region.

The local community have mentioned the HPP's contribution to their village life, which reportedly improves their socio-economic conditions. As emphasised in Group Interview 5 (and observed personally), the locals cannot practise agriculture to the extent it is practised in surrounding villages, due to the mountainous, steep and stony nature of the area. They do not have large agricultural lands, developed infrastructures, or job opportunities in other sectors like tourism, and they lack amenities like town halls and recreational areas. Since the company guaranteed to pay an annual fee of 20,000 Turkish Lira (approximately £4500, with an increasing rate in accordance with inflation), to the village council as long as the HPP works, the village saw this as an opportunity to improve their conditions (Group Interview 5, Interviewees 11 and 22). As also underlined by Interviewee 31, this money is given only in exchange of receipts of activities undertaken for the public benefit of the village. In other words, it was not just donated to the people. On the other hand, Group Interview 5 highlighted that the key reason that locals did not oppose to the construction was the company's decision to relocate the HPP from its initially-planned site to its current location. The former project was located at the heart of the limited agricultural lands of the village, and so the public initially perceived it with anger, since it would lead them losing their limited agricultural lands through expropriation. When the project was finalised into its current status, however, this frustration was appeased (see Gold Standard, 2010; Interviewee 11 and Group Interview 5). Furthermore, the Gold Standard (2010) indicates that the HPP was expected to create job opportunities for 50 people during the construction phase and 10 people for its operation. However, as confirmed by Interviewee 31 and Group Interview 5, the company never hired this amount of people. Interviewee 31 argued that the HPP's operation requires additional skills, which locals lack, although this was not mentioned in the Gold Standard report (2010).

In conclusion, the field data and comments about the Söğütlüdere HPP's socio-environmental impacts/risks are not as alarming as the other case study areas. In this case, the HPP's environmental impacts, for now, seem to be minor, while its electricity is used in carbon trade. The HPP also indirectly improves the socio-economic conditions of the local community, through company's payment of an annual fee to the village. However, it should be carefully noted that here it may take time to observe the actual impacts of the HPP on water allocation and availability, as also underlined by interviewees.

### 6.2.4 Kargı-Yanıklar HPP

According to Demir (2011) and the water use right agreement between the company and the DSİ (2007), the HPP referred to as Kargı-Yanıklar case in this research was planned to be constructed on Kargı Stream. Its capacity was planned to be 1.7 MW. This HPP is projected as a run-of-river scheme. The project site is upstream of the river, at Karacaören Village. Access to this village is problematic due to the poor infrastructure and steep nature of the site. However, as noted by Interviewee 21 and official documents, both locals and tourists use the construction site as a recreational area. It is indicated in an official correspondence that the site was rented to the Karacaören village council prior to the licensing of this HPP project. In this case, HPP construction started in May 2011, but it was stopped later in the same year by court decisions, which were initiated subsequent to public oppositions (see Chapter 8 for details).

Unlike the previous two cases, there were not any meetings or project documents (or EIA-related reports) used to promote the positivities of this HPP. Hence, the available official documents, local experts and all interviewees approached in this field all pointed to only one advantage of the HPP: Electricity generation. For example, Interviewees 6 and 28 only referred to this HPP's contribution to national electricity generation, while locals also constantly mentioned about it. However, the classification of electricity generation as a benefit of the HPP did not mean that locals welcomed it. For example, Interviewee 37 highlighted that '1.5 MW electricity [referring to the capacity of that HPP] cannot even meet the electricity demand of this village'. In addition, Interviewees 2, 7, 17 and 21 criticised the HPP based on a similar assumption. They urged state institutions to contemplate the socio-economic and environmental characteristics of the region, which would be damaged through the HPP construction, as these characteristics would benefit the region more than the HPP.

When the primary sources obtained during the field study and interviews are thoroughly analysed, it appears that this case has been publicised mainly due to the socio-economic and environmental risks associated with the HPP construction and its potential operation. As for the socio-economic risks of this HPP, local interviewees generally referred to its potential impacts on recreational activities and livelihoods in the basin. For example, Interviewee 21 mentioned that the recreational use of the construction site, where 'families take their

children to swim, while they are picnicking'. She, together with Interviewee 24, was concerned with the potential physical damage to that area during the HPP construction, which would hinder locals' recreational activities. Interviewees 2, 17, 24, 25 and 37 all explained that the main livelihoods of the locals, namely agriculture, fishing and touristic businesses (and nature tourism depending on the natural beauty), would be significantly affected should water flow be changed/interrupted and environmental damage be caused by the HPP. These issues will be discussed in detail when discussing recognitional environmental justice in Chapter 7.

In addition to these socio-economic issues, the main debate on the Kargı-Yanıklar HPP was centred on the environmental risks associated with its construction, which was not only frequently referred to by the locals, but also by the legal and official documents used in the process. The most visible environmental impact of this HPP was its contribution to deforestation. In other words, the deforestation caused by the company can be regarded as the only tangible environmental impact of this case. As indicated by the Interviewee 11 and Interviewee 37, the company cut down 'approximately 800 pine trees at the upstream [Karacaören Village]' to open the construction yard. Interviewee 37, for example, associated this incident with the analogy of 'lung cancer', in which he underlined that the HPP construction and its operation 'would cause cancer in the lungs of the region' by referring to this disappearance of trees, as well as their potential loss due to the decreasing water availability.

Since the HPP process was stopped later by the court decision, it would be beneficial to focus on the legal documents used in the legal process to further unearth the environmental risks associated with this process. Key documents like Council of State's, a higher court in Turkey, decision (2014) and expert report (no date) describe the ecological characteristics of the basin, while listing the environmental risks bound to the HPP construction. Council of State's recent decision about this HPP process (see Chapter 8 for details) emphasises that the region hosts endemic species like *Liquidambar orientalis*, the population of which has been decreasing due to anthropogenic reasons, and might be further exacerbated by the HPP construction. The same document also highlights that the region represents a sensitive ecosystem, on that requires more care when any sort of development projects are attempted. That expert report also explains the sensitivity of region further by indicating that the Kargı Stream is the main water source of the basin, which the most part is classified as a 'Special

Environment Protection Area' (see Chapter 8 for details). It maintains that the region has all characteristics of Mediterranean climate and vegetation, including pine forests and Maquis shrubland, the characteristic tree groups of Mediterranean climate.

The expert report is devoted to explaining the existence of the *Liquidambar orientalis* and the conditions needed to maintain their population. Accordingly, it underlines that the basin, especially the proposed construction site and areas closer to the riverbed, host the majority of the *Liquidambar orientalis* in the province. This is because the level of phreatic ground water, which is the key condition for these species to maintain their lifespan, is higher. It also specifies that Turkey is committed to the protection of endemic species, including *Liquidambar orientalis*, through the Convention on the Conservation of Wildlife and Natural Habitats, known as the Bern Convention. This has led Turkey to design protected areas for this species' conservation. The report concludes that a region, holding characteristics of Mediterranean wildlife and endemic species, should not be disturbed further through HPP construction, which would put significant pressure on the natural life there. It names, for example, decreases in future water availability, pressure changes in phreatic ground water, soil erosion, further deforestation and damage on animal populations (due to construction and future changes) as likely irreversible risks of the HPP construction. All of these elaborations about the environmental risks of the Kargı-Yanıklar HPP have had key role in this process, since they are perceived as the main reasons of the cancellation of the process.

In conclusion, when the HPP process of Kargı-Yanıklar is brought into greater focus, it appears that its only contribution to electricity generation was outspoken as its benefit in this region. However, in line with locals' comments and the legal process, it became apparent that there are serious socio-economic and environmental risks associated with the HPP construction and its operation. These risks would significantly affect the local population and natural life in the basin. It can be generalised that the existence of *Liquidambar orientalis* in the region was the key issue, shaping the HPP process of Kargı-Yanıklar, especially when the legal process is analysed deeper (see Chapter 8).

### 6.2.5 Yuvarlakçay HPP

The Yuvarlakçay HPP was projected as a run-of-river scheme, which was to be built at the source of the Yuvarlakçay Stream. The HPP's production capacity was determined as 3.3 MW, while it was projected to annually contribute to 2.7 million Turkish liras (approximately £700,000) to the Turkish economy (Akfen, no date). Immediately after the company initiated the construction by cutting trees in the projected construction yard in December 2009, the local people of Pınarköy (the closest settlement to the stream) mobilised against it (see Çobanoğlu et al, 2014). During a year of active resistance from the local community, and subsequent court decisions backing locals' struggles, the company withdrew itself from the process in April 2010, marking the first HPP case of Turkey which a company withdrew itself due to public opposition.

When the proponents and opponents of the project are heard and the relevant documents published by these two groups are evaluated, the distribution of environmental benefits and burdens of this HPP can be documented. Unsurprisingly, the proponents' portrayal of the process includes very few references to the socio-environmental risks of the project, despite the court decisions against them (see Chapter 8 for details). The proponents of this HPP claim that the construction's environmental impacts would be too minor to create a 'fuss' (see Interviewee 31). On the contrary, Interviewee 31, the brief brochure of the HPP and company's PowerPoint presentation asserted that the HPP would have several socio-economic advantages for the surrounding communities. Interviewee 31 argued that the HPP would 'indirectly contribute to the village, since the electricity produced would be eventually used in Turkey'. He maintained that the HPP would employ local people, especially during its construction, while he also stated that the company might financially assist to the village during the HPP's operation, as seen in the Söğütlüdere case. The project's presentation claimed, without any commitments or tangible proposals, that 80 people would be hired for the construction; that local businesses would be preferred for the purchase of construction material; that the roads of the village would be rehabilitated to give access to the larger vehicles; and that locals would be used for transportation of the employees. Moreover, Interviewee 31 proudly mentioned that they, as the company, were planning to 'create a recreational area at the construction yard, the ownership of which would be given to the village', which, as he maintained, would create economic advantages for the local community.

When opponents' arguments and publications are evaluated, the advantages of the HPP presented above can easily be challenged, especially in terms of its (potential) impacts on the environment. Most importantly, the Yuvarlakçay HPP had an observable environmental impact that, as Çobanoğlu et al (2014) documented: 875 pine trees, eight monumental plane trees and 17 oriental planes were cut down to open the construction yard. This amount was also confirmed by Interviewee 31. In addition to this incident, although not particularly covered by the company's documents in detail, the HPP would alter the ecosystem significantly. This is because the site is known and endorsed in a series of legal and official documents, which are reprinted in Çobanoğlu et al (2014) and in the company's own presentation, as a part of the Special Environment Protection Area and Cultural Assets Protection Area (see Chapters 7 and 8 for the details). These documents implied that the ecosystem of the site is a sensitive one, and that Yuvarlakçay is one of the most important water sources for the basin. For example, the Ministry of Environment and Urbanisation (2014) indicates that the Köyceğiz-Dalyan Special Environment Protection Area, within which the HPP site remains, hosts 126 bird species. Çobanoğlu et al (2014) further reveal that the site is inhabited by protected and endangered animals such as mountain goats (*Capra aegagrus*), foxes (*Vulpes vulpes*), caracals (*Felis caracal*), otters (*Lutra lutra*) and weasels (*Martes foina*), in addition to the characteristic flora of the Mediterranean climate. There is no need to stress the importance of water in maintenance of the wildlife in such a sensitive area.

As highlighted by Interviewee 8 and seen in the company's documents, the amount of water to be released as minimum flow was indicated inconsistently. This created concerns among the local communities regarding the future water availability and access, while also opening the debate on the future of the maintenance of this ecosystem (see Interviewees 4, 10, 16 and 18; see also Chapters 7 and 8 for details). In addition to the water availability or minimum flow, there also should have been concerns about the construction works held in the project site, which eventually planned to cover 38,130 $m^2$ land.[24] 22% of this land is classified as agricultural, while the rest is forestry. [25]Hence excavations would cause habitat destruction, limit animal behaviours and harm the locals' economic activities, as analysed further in Chapters 7 and 8. In the end, all these issues demonstrate that the Yuvarlakçay HPP was

[24] See the company's brief brochure.
[25] See the previous footnote.

associated with serious environmental risks, as opposed to its depiction as an environment-friendly project.

As for its socio-economic impacts, Interviewee 8 and Interviewee 10 argued that the employment opportunities offered for the locals during the construction were not compatible with their current businesses, and they were not 'long-term'. Both contended that their current businesses would have been significantly damaged by the construction and operation of the HPP. Interviewee 8, for example, said that as a tourist guide, he frequently brings tourists to the construction yard for outdoor activities (confirmed by personal observation). The HPP would take this use of the stream away from him by damaging the natural beauty. Interviewee 10, on the other hand, said that he and other restaurant owners, whose restaurants are located next to the stream and the construction yard, would lose their businesses, while their employees would eventually have to be released (see also Interviewee 15). Interviewee 4, 16 and 18 claimed that they feared they would lose access to irrigation and drinking water, which they obtained from the stream. This disturbance would have threatened their main livelihoods —subsistence agriculture. Regarding the recreational zone that the company promised to constructed prior to the completion of the HPP (see Interviewee 31), it could be claimed that locals would not be happy about such a construction, considering the fact that none of the interviewees ever referred to it during the interviews. The reason may be due to the fact that this facility was not mentioned in any of the project's documents used during the process, but was developed later, maybe to appease the public opposition (see Interviewee 31). However, the local interviews suggest that the locals would not accept such a construction, since they are quite attached to the site and its natural beauty. All of these interviewees (aside from Interviewee 31) referred to in this paragraph clearly stated that they are proud of the basin's natural beauty, and that they frequently use it for the recreational purposes. For example, Interviewee 17 described this as follows:

> 'I sometimes thank god [for Yuvarlakçay]. It is a blessing of god,…a wonder of the nature. For example, my kids [studying undergraduate in the other cities of Turkey] brought their friends here, and Yuvarlakçay was the first place they showed to their friends…'

All these examples indicate that the Yuvarlakçay HPP would have more socio-economic implications on the local community than were presented in the company's documents.

In conclusion, as understood from this case, the Yuvarlakçay HPP was associated with serious socio-economic and environmental implications. The company defended their project based on its contribution to national economy and energy generation, with a few tangible local benefits including so-called job opportunities and construction of a recreational area. However the locals were strongly against the HPP due to its destruction of the environment as well as its potential impacts on their livelihoods and socio-economic status.

### 6.3 Distribution of Vulnerabilities in the Western Mediterranean Province's HPP Process

As explained in Chapter 3, natural disasters and environmental policies impact differently upon different groups depending on their vulnerabilities, which are characterised by different patterns such as age, race, disability, income and livelihoods. The distribution of these vulnerabilities also determines recovery, access and response ability of those groups to environmental changes (Walker, 2009). HPPs are implemented on the rural areas, and due to the fact that Turkey's rural population is repeatedly viewed as being vulnerable (see Kudat, Peabody and Keyder, 2000; Yılmaz, 2014), the vulnerabilities existing at Turkish villages are explored first in this subsection. Following this national scale portrayal of the vulnerabilities of Turkish rural life, this section focusses on case study areas and investigates how the distribution of these vulnerabilities have influenced HPP development processes, while also being affected by them.

An examination of the academic literature (see Öztürk, Hilton and Jongerden, 2014 and Yılmaz, 2014), governmental reports (see the Ministry of Agriculture and Rural Affairs, 2010) and international organisations' reports (OECD, 2011) on Turkey's rural development reveals general characteristics related to the rural life, which are also described as the factors deeming rural communities as vulnerable in Turkey. Although these works have carefully distinguished that the socio-economic, cultural and regional differences and dynamics of Turkey represent a wide range of characteristics of village life, they are still able to present a general picture of it. The OECD (2011:58) encapsulates the main characteristics of Turkish villages as follows:

> '…the workforce is poorly-educated and low-skilled;…the development and maintenance of physical, social and cultural infrastructure is insufficient; an important dependence on subsistence agriculture

> exists; agricultural and non-agricultural income-gathering activities are inadequately diversified; there is a high rate of hidden unemployment and low income levels; migration is on the increase (from rural to urban and inter-regional areas); and the population is aging.'

While these characteristics are repeated in the other sources mentioned above, Öztürk, Hilton and Jongerden (2014: 379) add that two other characteristics: the low-cost living and strong communal ties. They maintain that '[t]housands of rural communities… remain founded on relatively well-established…spatial practices and still dominated by family-owned and family-run smallholdings in primarily local contexts of extended family and close communal relations', whose economic activities remain 'market-oriented' and are shaped by it (Öztürk, Hilton and Jongerden, 2014: 379).

Instances of these general characteristics of Turkish villages are found in the villages studied in this research. However, due to the lack of statistical data at the village level, field observation is mainly applied to authenticate these characteristics in the villages visited in the Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay basins. It would not be wrong, for example, to generalise that the local populations consist mostly of middle-aged and elderly people. Of the interviewees approached at these localities (including the group interviews) all bar three were above 40 years old. Also, as observed in these villages' daily lives, it was only kids, middle-aged and elderly people were visible in the public sphere. The reason of this can be explained through another of the characteristics named above: Migration. Although Aegean and Mediterranean villages are recipients of migrants such as retired people and seasonal workers, due to the touristic nature and climatic features of the province (see Interviewee 13), emigration is still cited as an important feature of all these villages. For example, Interviewee 25, born and raised in Yanıklar village aged 29, does not live in the village, and Interviewee 20 of Pınarköy, Yuvarlakçay, wants to move to a city for a decent job. In addition, Interviewees 17 and 21 and Group Interviews 3 and 4 frequently raised their fears of emigration if they lose their livelihoods. In short, these interviews and field observations demonstrate that emigration is still a big problem for these villages, due to the lack of decent jobs and further socio-economic opportunities.

In relation to this point, with the exception of the villages of Kargı and Yanıklar villages (which are relatively larger and closer ones to the town centres), it should be noted that cultural and social amenities are quite limited in all of the villages studied in this research. For example, the key social centres of the villages are the traditional coffee shops, which are

traditionally used by the male populations of the villages. The villages have very few groceries or handcraft shops like carpentries and hardware shops, and they only have primary schools. Local people have to visit the nearest town (or city) centres to meet their needs, engage with social activities and pursue secondary or higher education. Another characteristics of these villages is that communal social relations are highly developed. That is, due to the lack of social activities and customs dominating the social life, people are constantly in contact with each other, promoting close relations. This means that everyone literally knows each other and has a certain degree of communication. It became apparent during interviews that the mobilisations of local people against the HPP constructions present good examples of their close relations and active communication.

Unlike several of Turkey's villages (see Öztürk, Hilton and Jongerden, 2014), the physical infrastructure of all the villages analysed in this research can be regarded as relatively developed, meaning that they have reasonable sewage, electricity, transportation and domestic water (and irrigation water) services. However, this was not the case for the village of Söğütlüdere, or for the village of Palamut in the Saklıkent basin. In Söğütlüdere, participants of Group Interview 5 complained about the roads connecting the village to the surrounding settlements, which are not in good condition (this was also observed during field visits). They also complained that the village does not receive adequate investment from the state to improve infrastructure. In addition, the members of Group Interview 4 in Palamut complained that they had been experiencing infrastructure problems for a long time, which have not been solved by any governments so far. They mainly complained about the fact that their irrigation canals have not been functional for 60 years, and their roads have not been improved. Furthermore, municipal services have not been delivered to the village, although surrounding villages like Çukurincir, Eşen, and Aklar do not have such problems. It was explained by an elderly participant of Group Interview 4 that this is due to the administrative status of the village, which is at the border of Antalya and Muğla, both of which are confused about which one is responsible for the village.

Furthermore, all of the villages visited during the field study commonly practiced subsistence agriculture, where 'people are able to feed themselves' as indicated by Interviewee 11. In addition to this, family-run smallholdings constitute the essential livelihoods in all these villages. For instance, Interviewee 37 (and his wife) of Kargı village, Interviewee 16 and 18 of Yuvarlakçay (a married couple) and a father and son who participated in Group Interview

4, all work together in cultivating respectively their gardens, greenhouses and fields. In addition, Interviewee 2 and his wife run a boutique hotel they own in Yanıklar village, while Interviewees 10 and 20 are relatives who run a restaurant in the Yuvarlakçay basin. These examples imply that small (or very exceptionally medium)-scale agricultural and touristic activities are the main livelihoods of these villagers, which are generally classified as being family-run. These livelihood-related characteristics deserve more elaboration, since they are asserted as one of the main concerns of the local populations in shaping their reactions to HPPs (see Chapters 7 and 8).

Before detailing each basin's livelihoods and economic activities, it is necessary to note that the Aegean and Mediterranean villages of Turkey are named as semi-agricultural; their main livelihoods are not only limited to agricultural or agriculture-related activities, but they also include complementary economic activities such as tourism and fishing (see Öztürk, Hilton and Jongerden, 2014). In addition, the same source clarifies that the Aegean and Mediterranean villages of Turkey have relatively higher income than the other provinces, despite a lack of statistical data to verify this. However, when case areas of this research are brought into greater focus, it can be claimed that such a characterisation perfectly fits the villages around the Saklıkent, Kargı-Yanıklar and Yuvarlakçay basins. Firstly, Fethiye Chambers of Commerce and Industry's socio-economic report of 2013 (2014) indicates that the Eşen plain, lying within the borders of the Saklıkent HPP, is considered as one of the most fertile agricultural areas in Turkey, while Kargı-Yanıklar's soil fertility is also specifically named in the report. As indicated in the report, and confirmed by Interviewee 3 and Group Interviews 1, 2, 3 and 4, the locals of the Saklıkent basin are predominantly engaged with agriculture and greenhouse businesses. Moreover, Interviewee 11 names fishing as one of the key sources of income for the locals of this basin. Fish-farms of different scales can easily be observed by the stream on the route taken to visit these villages from Fethiye town centre to the Saklıkent Valley via Demirler, Eşen, Çukurincir, Palamut, and Aklar villages. The proximity of these villages to the Saklıkent Valley, as one of the most popular touristic destinations of Turkey due to its tremendous nature, also enables locals to run small-scale touristic businesses like restaurants, souvenir shops, small family-run hotels and local entrepreneurs organising outdoor activities such as mud-bath and rafting sessions, especially around Aklar village that creates job opportunities for local populations in a sector other than agricultural one.

A similar story can be told for the Kargı-Yanıklar basin. As Interviewees 24 and 37 emphasised and a field visit verified, agricultural activities are commonly practised in the Kargı and Yanıklar villages, both of which are regionally famous for citrus trees and pomegranate trees. Interviewee 37 highlighted that 'they [agricultural activities] are all small- and medium-scale, here there are no landlords and one claiming that s/he has the largest field does not have more than 50 acres'. In addition to agricultural activities, as Interviewee 17, 21, 24 and 25 mentioned, fish-farming is one of the core livelihoods of the basin's locals. Interviewee 24 claimed that 300-400 people from Yanıklar, Kargı and Karacaören villages, including her husband, work in the fish-farms. Moreover, downstream of the Kargı stream hosts tourist businesses ranging from luxury hotels and holiday resorts to ecotourism-oriented facilities, which are run by locals like Interviewee 2 and Interviewee 17. These businesses predominantly employ the local people for their daily works, as verified through the observation.

Pınarköy, as the closest settlement to Yuvarlakçay HPP, holds similar features with the ones mentioned above. As personally observed [26] and indicated by the all interviewees of the basin, subsistence agriculture is the main economic activity of the village. Interviewee 10, as the owner of one of the trout restaurants, underlined that restaurants also provides employment opportunities for the local people. Interviewee 15, for example, clarified this point that '8-10 restaurants [referring to the ones founded next to Yuvarlakçay Stream] means…, if each restaurant has 8-10 employees, 80-100 families. [Those restaurants are a] very serious income source for them, especially in the tourism season'. As witnessed during the field study, the basin is frequently preferred by domestic and foreign tourists for outdoor activities, as confirmed by Interviewee 8. He maintained that tourists bring money to the shops and restaurants of the basin, while locals also find opportunity to exhibit and sell their crops to them. In the end, the analysis of the villages in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay Basins can be classified as semi-agricultural ones, in addition to Öztürk, Hilton and Jongerden (2014).

When the focus is directed to Söğütlüdere and Çayan villages, the two closest settlements to the Söğütlüdere HPP, the abovementioned analysis changes. Unlike the previous examples,

[26] For example, Interviewees 16 and 18 talked to me when they were harvesting strawberries from their small greenhouse.

as Group Interviews 5 and 6 clearly indicated, Söğütlüdere and Çayan villages are heavily dependent on agricultural activities for their livelihoods. They complained that the amount of agricultural lands and their soil fertility are not as same as the villages described above. Also confirmed through the observation, these villages do not have alternative income sources like tourism. However, it is noteworthy that there is one fish-farm in the upstream of the village, which limitedly offers employment opportunities for the locals of Söğütlüdere.

Following these detailed descriptions of Turkish villages, particularly the ones visited for this research, the HPP experiences of each case can be analysed in the context of distribution of vulnerabilities. As inferred from those depictions, existing conditions of these villages provide relative advantages for the villages in Saklıkent, Kargı-Yanıklar and Yuvarlakçay, while they already cause deprivation of the locals of Söğütlüdere. Yet, these advantages, especially in terms of the villagers` livelihoods (agriculture, fishing and nature tourism), are over-dependent on water, which makes them vulnerable to the potential socio-environmental changes caused by the HPPs. When HPPs were publicised at these localities, interviewees frequently referred to existing socio-economic conditions and how HPPs could improve or deteriorate them. This is one of the key factors shaping their reactions against HPPs and fits under the analysis of distribution of vulnerabilities.

For the HPP cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay, it can be claimed that overdependence by locals on streams for their livelihoods made them opposed to the constructions, since they thought their access to water would be denied; that they would become more vulnerable as a result of the potential decrease in water availability and environmental change; and they would not recover from these changes due to their vulnerabilities, as clearly indicated by the local interviewees. [27] For Saklıkent HPP, Group Interviews 1, 2 and 3 revealed that HPP construction would decrease the amount of water they use in their agricultural practices, which would lead them to lose their fields due to expropriation process and expected inundation as foreseen by the project (see Chapter 7). Three participants of Group Interview 4 in particular, who are the landowners of the fields to be appropriated during the HPP process, asserted their fears about the expropriation and how it would deteriorate their existing socio-economic conditions. One of them highlighted that

[27] The similar analysis would be better integrated to the next chapter's 'Place Stigmatisation' section. More details will be revealed there.

‘we have already been left vulnerable through agricultural and urban policies [of Turkey]’ and ‘we cannot survive if our lands are expropriated with low prices’ since they are only skilled in farming and the expropriation fees reportedly would not be enough for them to afford a land with similar size and soil fertility. This can also be used as an example for how proposed recovery mechanisms (in this case, expropriation fees) are not helping the (potential) burden-bearers of the HPP process of Saklıkent. Interviewee 3’s comments supported those arguments, but from a different perspective: he argued that HPPs would prevent the carriage of alluvium soil from the upstream to the downstream, which would affect the farmers’ agricultural production in the medium- and long-term since it would decrease the soil fertility. Most importantly, Interviewee 3 claimed that the construction and operation of the HPP on Saklıkent basin would sweep the natural beauty of the basin and degrade the touristic value of the province, which would lead to the unemployment of several locals working (and running) in the tourism sector, particularly in Aklar village of the basin. He clarifies that ‘this is a world-wide known place, it is wrong to construct HPP here…In such touristic places, they [policy-makers] should not think that water flows in vein, instead it supports this [natural beauty]’. Overall, he evaluated the Saklıkent HPP as ‘catastrophic’ for the local people, which, according to him ‘would exterminate the locals and degrade the location’s identity’. This argument underscores the idea that the Saklıkent HPP would make the locals more vulnerable. It was expected to deteriorate their socio-economic conditions by directly impacting on people’s livelihoods, which are over-dependent on the stream, and proposed recovery schemes like expropriation fees would not be helpful for them (see Chapters 7 and 8 for more details).

In Kargı-Yanıklar basin, the argument raised by local interviewees are not radically different than the Saklıkent case. Interviewees 2, 17, 21, 23, 24, 25 and 37 all highlighted the vital role of water in their livelihoods and social life and they contended that the HPP, by reducing water availability and hindering their access to the stream, would make them more vulnerable to changes. For example, Interviewee 17 pointed out that ‘here, water amount has already been decreasing and HPP would just accelerate this decrease’. Decrease in water availability and potential restriction of their access to the stream are described as ‘disastrous’ by these interviewees, especially by Interviewee 17. He argued that ‘our crops, our bread rely on water…and people have already struggled to earn a living [in the existing conditions, which are threatened by the HPP construction]’. Interviewee 37, on the other hand, stated that these

villages experienced serious problems regarding irrigation and provision of irrigation water in past. Accordingly, he demoted his argument against the HPP to the potential decrease in water availability in the basin due to the operation of HPP, 'which would impact on the availability of irrigation water and likely to limit our irrigation activities'. Interviewee 2's evaluations of this HPP were also centred on the water availability, as 'the HPP would emaciate the stream more' and 'hit the natural beauty fed by the stream'. By grounding his perceptions on this point, he argued that the HPP would decrease the touristic importance of the region, which would impact one of their main livelihoods, as also raised by Interviewee 25.

Moreover, Interviewee 21 and 24 and two other women living in this basin complained about their limited opportunities of socialisation in the basin. They underlined that proposed HPP's construction yard and pitches alongside the stream are commonly preferred by the locals for their recreational activities. Furthermore, HPP construction, according to them, would deprive them of enjoying those places. Interviewee 21 elaborates that 'they [recreational activities and these recreational areas] are the parts of those people's lives, you cannot just take them away from them'. Above all, interviewees approached in this basin explicitly raised their concerns over the fact that migration would become a possibility for them should HPP change their livelihoods. Interviewee 21, for example, claimed that 'these people already expect more jobs, more amenities and social opportunities. When they are not ensured and their existing conditions are threatened more [by the HPP], they feel devastated and migration becomes a possibility for them'. Interviewee 17 supports this view by claiming that 'if there is no water, there is no life. If there is no water, you cannot practice agriculture, you cannot plant fruit trees. Then, what are you going to do? You will have to migrate'. All these evaluations demonstrate that the HPP would make them more vulnerable by limiting their major livelihoods and social opportunities through changing water allocation and they would not recover from these changes, which would bring the question of migration to their agenda.

As shown above in other basins, fear of losing access to water and potential disappearance of water from its source are frequently regarded by the locals as the main reasons of their opposition; the same can be said of the Yuvarlakçay HPP. As clearly indicated by local interviewees approached during the field study (Interviewees 4, 10, 16, 18 and 20) and eight others reprinted in Çobanoğlu et al (2014), locals had prioritised their existing vulnerabilities and how HPPs would exacerbate them when they were shaping their opposition to the HPP.

Accordingly, vulnerabilities and the role of vulnerabilities in Yuvarlakçay's HPP process can be classified under three headings: livelihoods, limited social opportunities and dwelling problems due to the administrative status of the village as a forest village (see Chapter 7 and 8 for details). Firstly, as observed during the field visit, it is obvious that the majority of Pınarköy and its surrounding settlements earn their living through subsistence agriculture and animal husbandry, while tourism also offers them employment opportunities in the basin. This is especially true for Pınarköy, which hosts four trout-restaurants in the basin. It is unanimously indicated by interviewees and those who were interviewed in Çobanoğlu et al (2014) that water is the vital source for them to maintain their livelihoods. Interviewee 16 clarifies it as follows:

> 'No one in this village begged for money…in their lives. This year, I am cultivating strawberries[in her small greenhouse], our other friend, for example, cultivates other vegetables like okra, black-eyed pea and aubergine…We all put these crops to marketplace and sell it even if they are cheap. In the end, it is our labour. We earn a living [with these crops], we pay for our children's education [with them], we meet our needs with these crops…You are fed from this water, your animals are too, all your irrigation water and drinking water comes from there…When you save your water, you will not be hungry.'

Furthermore, a housewife's comments can be complementary to this argument, when she said that 'I have always thought people, who are worse-off than me. I am alone, I do not have a family or children, but there are elder people and they will bequeath these lands to their children. They have nothing else, no other livelihood' (Çobanoğlu et al, 2014: 283). Interviewee 4, when supporting these claims, underlined that 'everyone shares their products with each other, especially with the needy ones'. He added that subsistence agriculture is an important livelihood and culture of the village for which, as he contended, 'water is an absolute necessity'. Needless to say, Interviewee 10 and other restaurant owners interviewed in Çobanoğlu et al (2014) highlighted that it is that water enabling them to run those businesses and they have no other option than these livelihoods if the HPP is constructed and reduces the water availability in the basin. All these explanations reaffirm how their recovery and response to environmental change would be limited if they experience even a slight change in the water availability in the basin, since their livelihoods are over-dependent on water.

In line with the analysis of livelihoods in this basin, future water access was an important topic that interviewees highlighted. Generally, they tended to consider that their access to water would be significantly restricted and this would deteriorate their socio-economic conditions when their explanations are brought into greater focus. Interviewee 10, for example, stated that:

> 'We were afraid of losing our water. A couple of years ago, there was an HPP constructed in Akköprü [surrounding basin in Dalaman]. We talked to the *mukhtar* of that village. He told us that 'they fence the watershed, we cannot access, if you have a chance, do not let them construct one'.'

Interviewee 4 advocated this point by complaining that 'what would we do with so-called free electricity, after we would not even see our water', which exemplifies how the fear of losing access to water shaped the locals oppositions and once again emphasised the vitality of water in the locals' lives. Along with such elaborations, Interviewee 16's comments also illustrate this fear of losing access to water: 'When the company enters to that area [construction site], believe me, we cannot even go to the down [the village is just three kilometres above the construction site]. In our own heaven, at the top of our heavenly water, Yuvarlakçay, we would be obliged to watch as outsiders'. These points, also argued in similar ways by eight more locals in Çobanoğlu et al (2014), demonstrate that potential restriction of locals to access to Yuvarlakçay stream was perceived as a threat to their existence, which was explicitly contemplated as a pattern to make them more vulnerable.

These concerns about losing access to water and decreasing water availability are reflected when locals were talking about the possibility of migration due to the HPP construction. One housewife from the region stated, when she was asked why she opposed to the HPP, that 'our lands would be deserted; we would not practise animal husbandry; our trees would be faded away; if we decide to migrate, we do not have anywhere to go, we have no other water than this' (Çobanoğlu et al, 2014: 290). Interviewee 18 also highlighted the similar concerns as follows:

> 'One or two people would make money out of the HPP, but this village would become completely waterless, hungry and miserable. Then, what would happen? When water is taken away, everyone will migrate. But where? Is there anywhere to go? No!'

It is understood from such comments that the HPP would make these locals more socially-vulnerable. It is also inferred that locals do not believe that they would recover from potential water loss and/or restriction of access to water.

When talking about the case of Yuvarlakçay HPP and its analysis centred on distribution of vulnerabilities, it is impossible to avoid from the Pınarköy's administrative status as a forest village. Although more details on this will be disclosed in the following two chapters, this issue should be at least mentioned briefly at this stage, since it is directly related to distribution of vulnerabilities. Accordingly, Interviewee 4 reported that due to the fact that around 80% of the village are classified as 'forestry', meaning that people living those areas do not hold title deed for their properties, but their existence has been customarily tolerated by the governments for years. According to the company's document, 89% of the lands expropriated for the project are forestry, but in reality, it does not mean that those lands are not utilised by the locals. As Interviewees 4, 10, 16 and 18 highlighted, the HPP process would lead people to be swept away from the lands that they have been inhabiting for long time, since the company officially acquired the right to use such lands during the construction process (confirmed by Interviewee 12) through expropriation and appropriation processes. The construction of Yuvarlakçay HPP would make a group of people homeless or field-less and eventually more vulnerable due to this clash between administrative rules and customs, which already makes them vulnerable (details will be disclosed in the next two chapters).

The HPP case of Söğütlüdere illustrates the similar story from a different angle. As previously introduced, socio-economic and environmental conditions of Söğütlüdere village are not as advantageous as the other cases analysed here, as confirmed by personal observation, Interviewees 11 and 22 and Group Interview 5. However, the HPP process of Söğütlüdere concluded with the construction of the HPP. This process is also shaped by the existing socio-economic conditions of the village which mark its ongoing vulnerabilities. As clearly contended by the participants of Group Interview 5, locals were opposed to the HPP construction in the beginning of the process because the HPP would further prevent them from practising agriculture and they would lose their fields due to the expropriation process. In other words, they initially thought that the HPP construction would make them more vulnerable, due to its potential impacts on water availability and land use. However, as will be explained in Chapters 7 and Chapter 8, the existing socio-economic disadvantages of the village, namely its lack of social amenities, infrastructure and economic activities, were used

as a window of opportunity by the company to get public consent for the construction (see Interviewee 31). Accordingly, the company secured the construction of the Söğütlüdere HPP by providing an annual payment to the village, as long as the HPP operates there, to allow village's administration to improve their socio-economic conditions. According to Interviewees 11, 13 and 22, in spite of the existence of weak opposition in the village, the locals' financial capabilities discouraged them from demonstrating or pursuing legal processes, due to the financial burdens involved in those processes. One participant of Group Interview 5 declared that the legal process would be too costly for them to pursue without knowing if the HPP would really damage them, as it is projected in the case of their possible legal triumph.

In conclusion, this section demonstrated that Turkish villages, including those in the Western Mediterranean Province, experience numerous socio-economic problems, which lead locals to be considered as vulnerable by national and international institutions. These socio-economic and environmental problems would be exacerbated through the HPP constructions and locals would have become more vulnerable as a result of the HPP processes in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay HPP cases. On the other hand, the Söğütlüdere HPP case showed that the relatively poor socio-economic conditions and vulnerabilities associated with that village were important factors, leading locals to grant their consent for the HPP construction. They at least thought that their vulnerabilities would be mitigated through the company's annual payment to the village, while their perception of the HPP was not as alarming as in the other case study areas. In the end, as this analysis reaffirmed, the distribution of vulnerabilities prior to constructions, and their potential impacts on their future distributions (believed to cause more deprivation for the local communities), played key role in shaping the HPP processes in the each case study areas.

## 6.4 Distribution of Responsibilities in Turkey's and Western Mediterranean Province's HPP Process: Exploring 'Who Gets What from the Environment?'

Analysis of these processes in terms of the distribution of responsibilities leads to a broader environmental justice claim. The main argument of this pattern centres on the question of whether environmental benefits, burdens, risks or vulnerabilities are distributed in accordance with the (potentially) affected communities' contribution to the emergence of relevant environmental problems/policies. In other words, as Walker (2009: 622) contends, 'when harm or diminished wellbeing is experienced by already marginalised groups as a direct consequence of the actions of those that are more advantaged, then claims of justice become more powerful'. During the field study of this research, it was explicitly argued by the locals that there was a certain perception of 'winners' and 'losers' within the HPP processes. This perception was significant in shaping the HPP processes and their claims of justice. Accordingly, this section elaborates such claims by providing examples from the case areas, within the context of the distribution of responsibilities.

As elaborated up to this point, the HPP processes of Saklıkent, Kargı-Yanıklar and Yuvarlakçay were opposed by the majority of people living in those basins, due to their (potential) social and environmental impacts. The Söğütlüdere HPP was consented, however, because of its potential to improve the socio-economic conditions of the Söğütlüdere village. When interviewing the locals of the case study areas, their evaluations of the HPP processes in their localities frequently focussed on the disproportionate benefits enjoyed by the state and especially companies, while they regarded themselves as the victims of the (potential) processes. Local communities argued that state institutions favoured companies in the operationalisation of the HPP processes, enabling companies to benefit from all of the advantages of the HPPs, while depriving them of their existing socio-economic and environmental advantages (with the notable exception of the Söğütlüdere case). These critiques for the HPP processes of Saklıkent, Kargı-Yanıklar and Yuvarlakçay were very influential in shaping people's perceptions against HPPs in those areas. This fits to the pattern of distributive environmental justice, as clarified by Walker's (2009) quotation above and directly focusses on the question of 'who gets what in the environment'.

For the Saklıkent HPP case, as understood from the Group Interviews 1, 2, 3, and 4 and Interviewee 3, the general perception of the locals is that the company would enjoy the benefits, while the locals would be stranded in the case of the HPP construction. Interviewee 3 contemplated that 'any HPP constructions affecting this region should generate more income for the region than its normal conditions, but in Saklıkent, it is not the case' due to the reasons outlined in the previous two sections. He argued that instead of improving the conditions in the region, 'only few' would benefit from the HPP process. He identified the company as the main beneficiary, and themselves (the villagers) as the undisputed burden-bearers of the process. In support of this argument, participants of Group Interviews 2 and 3 frequently mentioned that the company operating in this region is owned by a holding of a MP of the ruling party. [28] Opponents of this basin tended to refer this relationship when they indicated their concerns about the EIA process undertaken there (see Chapters 7 and 8 for details). For example, the participants of Group Interview 3 underlined that 'company and representatives of various state institutions including DSİ sided with the company' and, according to Interviewee 3, they 'acted as if they are advocates of the company'. Interviewee 3 highlighted that such an alliance was not in favour of the local people, since the state and the companies denied their concerns and demands during the HPP process. The participants of Group Interview 3 also claimed that 'water is made available for the company at the expense of local communities', which 'is understood when state and company sided together' in the EIA meetings. They all implied that such a portrayal of the process, where the company and state conspired to construct the HPP despite the opposition, has pushed the locals to think that these two would be the beneficiaries of the process, rather than the local communities in Saklıkent. This led them to perceive the HPP process as unjust.

Similar concerns were raised in the Kargı-Yanıklar HPP case. In this case, interviewees utilised an 'anti-privatisation of water' stance (see Islar, 2012b and Özesmi, 2013). They stressed that they were against the privatisation of water, and emphasised the 'hidden agendas behind the HPP constructions'. Interviewees 2, 17, 21, 23 and 37 all stated that 'the real intention' of the HPP construction in Kargı-Yanıklar was to privatise water. Accordingly, they unanimously indicated that the company would benefit disproportionately from this HPP construction, since it would obtain water use rights for 49 years, while the villagers

[28] It is confirmed, but due to privacy reasons, names of the people and companies are not disclosed in this research.

would be destined to be faced with the abovementioned issues. Interviewee 17 said that 'it was important, the owner of the water. The beneficiary of the process is obvious: The company. This region would not be the beneficiary of the process…We want projects which may improve locality, we do not want irrelevant outsiders [referring to the companies] to get the whole benefits'. Interviewees 2 and 37, when supporting this view, concentrated more on 'the real intentions' of the companies, while elaborating on the abovementioned socio-economic and environmental damages of the HPP construction in Kargı-Yanıklar. Interviewee 2 argued that 'the electricity to be produced here [Kargı-Yanıklar] will not meet the HPP's cost…The intention is to trade the water, they do not ask it to us…This process does not improve the region at all'. Similarly, Interviewee 37 stated that 'I do not believe this HPP is for producing electricity. It is too small to even meet the energy demand of this village…It is all for the privatisation'. All these interviewees, including Interviewee 38 who was in favour of the construction, explicitly criticised the 'secrecy' followed by the company and the state during the HPP process. They claimed that the state did not consider the locals, but instead prioritised the companies' interests. For example, Interviewee 21 stated that

> 'These projects are generally projected for profits of companies with secrecy via politicians. We know that the MP of Muğla from the ruling party acts as a mediator for the companies which attempted to construct HPPs in this region…They [policy-makers] only consider [when planning the HPPs] what their sons, daughters would get in the process. They do not think about the locals' and nature's interests at all'.

These examples, along with the analyses introduced in the previous sections, imply that locals strongly consider themselves as being disproportionately disadvantaged in the HPP process. They feel that the company emerges as the main beneficiary, and it is backed by the state in its operations in their view. This has shaped their justice claims during the HPP process (see Chapters 7 and Chapter 8 for details).

Walker's (2009) contention of the distribution of responsibilities highlighted in the introductory paragraph of this section can be clearly seen in the narratives of the interviewees talking about Yuvarlakçay's HPP process. Interviewees 4, 8, 10, 12, 15, 16, 18, 19, 20 and 39 as well as those from Çobanoğlu et al (2014), highlighted that the company's disproportionate advantages at the expense of local populations were influential in shaping the locals' opposition to the HPP construction (and their justice claims). This influence was even noted in the external views like Interviewees 1, 7 and 30. They all explicitly identified

this disproportionality as one of the main injustices associated with their HPP process. In their perspectives, the locals were not happy with the idea that the water use rights were 'sold' to the company, since the company was expected to seize the area and limit people's access to water. They felt it had a hidden agenda other than electricity generation. Locals were also thinking about their future and how they might be affected by the company's takeover of the water use rights, which was believed to provide excessive advantages to the company in terms of the future use of water.

Interviewees 16 and 18 suggested that the real intention of the HPP construction was not to generate electricity but rather 'to grab that area and do whatever they want to do in the future'. They constantly mentioned that they could be denied to access to water only if the HPP was constructed in the basin. Following the previous distributive analyses of this process above, Interviewee 4 said 'we opposed to the fact that water was sold to the companies' by asking 'how can you interrupt my freely-flowing water?'. Interviewee 10, when supporting this argument, called the company as 'hypocrite', claiming that 'we opposed because…we thought there was something else in this process than energy generation, since the energy to be produced here was too marginal'. Interviewee 15 also argued that 'it is a little stream, it is that little to make you ask "how can it produce energy?"…I still cannot believe that it was an energy project, it was a project of water grabbing'. Moreover, Interviewee 19 raised his concerns about the hidden intentions of the process by claiming that

> 'the real trick here was to sell the water…Water is a lot of money…2.5 MW is too small to hassle about…Here, for example, the cost of the HPP is 10 million USD, today a company…can find this amount easily, and it means unlimited income [for the company] in the next 50 years [since they obtained water use rights for 49 years]'.

In addition, Interviewee 39 highlighted that 'there is no respect for the environment. There is no respect for the citizens. It is [referring to the Yuvarlakçay HPP] a thing which is done to make benefits available for the company'. Such arguments exemplify that the company would have more advantages in the process especially due to their takeover of water use right in the basin.

Interviewees like 8 and 12 further commented on how the company was in the advantageous position in the entire HPP process of Yuvarlakçay, which reinforced the arguments introduced above. Interviewee 8 highlighted that 'the state, government [and the company]

were at the one side, while the [local] people were at the other' in the Yuvarlakçay case. He maintained that

> 'We only raised our voice, we did nothing else. There were injustices [experienced by the locals], but there were no injustices [experienced by] the company…The state is supposed to protect its citizens and country, there were many wrong things experienced here, but [the state] does not care. It does not think [people], they generally protect the company, because the company is more important than the public in their eyes'.

Interviewee 12's comments needs to be stated here in support of this argument:

> 'In my opinion, the state's responsibility is to be as transparent as possible, but it sides with the capital [referring to the company] and it eases all the process for it in realisation of this process [of Yuvarlakçay HPP]…In fact, the state considers everything brought by the company as absolute truth and it departs from this point…Companies are established for profit…I wish them not to engage with the activities that may change the lives of the locals, but they generally do not care about them'.

These arguments demonstrate that the locals perceived the company as the absolute winners in the HPP process by the locals, while they saw themselves as the burden-bearers in Yuvarlakçay. This shaped their opposition and justice claims in the HPP process (see Chapters 7, Chapter 8 and, in particular, 9 for more information).

In summary, this section focussed on the broader question of who gets what in the environment in the HPP processes of the Western Mediterranean Province of Turkey. By doing so, the locals' perceptions towards the HPP companies and the state were documented within the framework of the distribution of responsibilities. This provided the conceptual bases for such claims as indicated by Walker (2009). Accordingly, the HPP opponents of the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases argued that the companies and the state were the main benefactors from the constructions; while they thought they would suffer from the processes. Based on the presentation of the field data above, it appears that these perceptions (of the locals) of certain winners and losers of the processes have led them to form their oppositions against the constructions, and have shaped their justice understandings regarding the HPP processes in their localities.

## 6.5 Conclusions

This chapter was centred on the first and arguably the core component of (environmental) justice, distributive justice, in analysing Turkey's recent HPP process. The main concerns of the chapter were: what the benefits and burdens bound to the HPP processes were and how they were/would be distributed across the society, what influenced these distributions and who were the winners and losers of the process, along with the existing literature. As indicated in the chapter, the distribution of environmental benefits and burdens/risks, the distribution of vulnerabilities and the distribution of responsibilities were used as the patterns of classification of the field data. Confining the analysis to this framework revealed the (in)justices experienced in the case study, and this empirically informed the concept of environmental justice in terms of its distributive dimensions.

For the first and arguably the most common pattern of distributive environmental justice, the distribution of environmental burdens and benefits/risks, the analysis mostly focussed on the distribution of environmental risks. This was because the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases had not been completed due to the public oppositions and legal processes, and because the Söğütlüdere HPP's actual impacts could not yet be observed and felt by the locals (see Group Interview 5) due to its very recent completion by the time of the field visit. However, perceptions towards the (potential) benefits and burdens of the HPP processes could be observed through the field study and interviews with locals. As demonstrated above, these HPPs were depicted as being vital in contributing to electricity generation and improving the socio-economic conditions in those localities, especially by supposedly providing new job opportunities for the locals. The Söğütlüdere case had an additional dimension to this, in which the company guaranteed to pay a certain amount of money annually to the village to improve their socio-economic conditions.

When it comes to the distribution of environmental burdens, the Kargı-Yanıklar and Yuvarlakçay cases were the only areas where actual impacts were witnessed, in the form of deforestation. Here the companies cut down a considerable amount of trees to open up the construction sites. This was important, because interviewees of those areas frequently referred to this when they were talking how the opposition movements were triggered and catalysed in those areas. However, the locals of these two cases (and the Saklıkent case)

mostly argued about the potential socio-economic and environmental impacts of the HPPs. As analysed above, the locals of Saklıkent, Kargı-Yanıklar and Yuvarlakçay were mostly against the possibility of losing their agricultural lands, irrigation water and natural beauty (which enable them to earn their livings from agriculture and tourism). Above all, the locals of all these three cases (especially the ones from Yuvarlakçay) based their oppositions on the possibility of them losing access to water, which could diminish the future allocation of water in their localities.

Following the revelation of the distribution of environmental benefits and burdens/risks, the second pattern of distributive environmental justice, the distribution of vulnerabilities, was brought into greater focus. By doing so, it became apparent that certain vulnerabilities, such as over-dependence on water in their livelihoods and social lives and their limited social opportunities, had played key role in shaping local populations' reactions against the HPPs in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases. In these areas, locals explicitly argued that HPP constructions would deepen their existing vulnerabilities, while further limiting their socio-economic opportunities. For example, the locals of Saklıkent and Yuvarlakçay reflected their fear of migration in the case of HPP construction, due to the potential deprivation of their livelihoods. When the Söğütlüdere case was analysed deeper, it was uncovered that the current distribution of vulnerabilities (which led to relatively poorer socio-economic and environmental conditions) was the key factor in persuading locals to grant their consent to the construction. As highlighted by the participants of Group Interview 5, the locals of Söğütlüdere thought that the annual payment promised to the village would mitigate their current socio-economic vulnerabilities. For this case, it could be claimed that the existing distribution of vulnerabilities pushed them to negotiate and settle with the company for the HPP construction. The vulnerabilities were the key reasons for them stepping back from their initial opposition to the HPP construction.

Along with these analyses, the third pattern of distributive environmental justice, the distribution of responsibilities, was used to complement the analysis of distributive environmental justice. According to the relevant literature, this pattern asks who are the winners and losers of the environmental policy processes and to what extent they are responsible for the disproportionate impacts of the policies. As introduced above, the interviewees of Söğütlüdere did not disclose tangible data for this analysis, although Group Interview 5 and Interviewee 31, as the representatives of locals and the company respectively,

presented balanced views. This allowed the research to refrain from having a strong claim about the winners and losers. The locals of Saklıkent, Kargı-Yanıklar and Yuvarlakçay, however, saw themselves as the potential losers (if the constructions were completed) and saw the companies and the state as the absolute winners of the HPP processes. The locals interviewed in Kargı-Yanıklar and Yuvarlakçay in particular asserted that companies were favoured by the state in the HPP processes, which further subordinated them. In addition, they underlined that the transfer of water use rights to companies would deprive them of access to water, which would only enhance the companies' profits. These notions will be detailed through the integration of other dimensions of environmental justice in the following chapters.

These distributive patterns' interpretations along with the ecological justice are embedded in this chapter, unlike the following chapters, where it is going to be explicitly explored within the environmental justice framework. For example, analysis of the distribution of environmental benefits and burdens/risks hinted that the nature was/would be disproportionately affected through the HPP constructions. Furthermore, the HPP cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay clearly showed the distribution of vulnerabilities toward nature in these processes, where sensitive ecosystems were threatened (as explained in Chapters 7 and 8). Furthermore, the interviewees of these areas also named the nature as a potential loser of the HPP processes, since the construction, and future changes such as decreasing water flow and habitat destruction, would disproportionately burden nature.

Overall, this chapter demonstrated that HPP processes are strongly associated with patterns of distributive (environmental) justice. These patterns and their reflections on the justice understandings of local communities play key role in shaping public reactions. This can be supported by the evidence obtained from the Western Mediterranean Province of Turkey, while similar outcomes can be reached in the Turkish HPP cases, as shown in Hamsici (2010), Islar (2012a, 2012b), Eryılmaz (2012) and Erensu (2013), all of which represent different perspectives.

# CHAPTER 7: EVIDENCE II: ENVIRONMENTAL JUSTICE AS RECOGNITION AND HPP CASES OF WESTERN MEDITERRENEAN PROVINCE

## 7.1 Introduction

This chapter analyses Turkey's HPP processes within the context of ***recognitional*** environmental justice. The main focus of this chapter is to present field data and demonstrate if Turkey's HPPs have recognised the group differences and particular needs and interests of people (and nature). Before going further, it should be carefully noted that the ideas of environmental racism, cultural misrecognition and intentional discrimination of a group of people based on group differences such as gender, income, ethnicity, religion, age and disability in the environmental policy-making as understood in its Western (or US)-centric context, are not relevant for these case areas, since the local population is ethnically Turkish and religiously Sunni, which are characteristics of the majority in Turkey. In addition, as introduced in the previous chapter, the case study areas are relatively better off (except for the Söğütlüdere case) compared to other villages of Turkey. Their general characteristics, including an elderly population and traditional lifestyle, are seen in the other villages in Turkey. In addition, as highlighted in Chapter 5, Turkey's HPP policies are prepared and implemented nationwide, regardless of such differences (see Figure 5.1 of Chapter 5). This means that the notion of group differences, as studied in the environmental justice literature, becomes irrelevant for this research.

However, the narratives of interviewees, relevant legal documents and field observations provide evidence for the recognitional aspects of environmental justice, which will be categorised under ***place stigmatisation*** in which the issues of senses of a place and place attachments of locals and their (mis)recognition in the HPP process will be revealed; ***recognition of locality,*** in which the extent of recognition of locals' and local professionals' needs, interests and expertise will be brought into greater focus; and ***recognition of nature,*** which will focus on the recognition of nature and its peculiarities, needs and interests.

## 7.2 Recognition of 'Place': Place Stigmatisation (Senses of A Place) and Place Attachments

Place stigmatisation has been introduced as a pattern of recognitional environmental justice. The concept probes into what extent development projects, technologies or, broadly speaking, environmental policies change a given place. This can either be seen with the positives associated with a place turning into negatives or with the deepening of existing negatives in a place (see Chapter 3; see also Wacquant, 2007, Walker, 2009 and Anguelovski, 2014). Accordingly, these scholars have recently been examining the implementation of stigmatising environmental policies. These eliminate the positives or deepen the negatives, due to the misrecognition of a place within the context of recognitional environmental justice (see Anguelovski, 2014). It should be noted here that this idea is different than the analysis of place attachments of people to their homes or lands. That said, place attachments and their role in shaping public reactions against the environmental policies are also necessary to attain a complete analysis of recognitional environmental justice, since they also require to be accounted during the environmental policy-making processes (see Simmons and Walker, 2004). This section investigates these two concepts in the HPP processes of Western Mediterranean Province of Turkey.

Depending on the definition of place stigmatisation, HPPs can be deemed as 'stigmatising technology' which is associated with 'danger, threat and degradation' when talking to the local people (see Walker, 2009:626). As exemplified earlier, HPPs cause numerous social, economic, environmental and cultural impacts on the localities they are being constructed. Such impacts imply that the places are misrecognised and the positive senses of the place are affected by replacing them with negatives through HPPs. This can be the subject of an environmental justice analysis. As Hamsici (2010) indicates, this is best seen in the HPP cases of the Black Sea Province. It was here that environmental degradation, such as deforestation and the loss/dramatic changes of water flows, and economic impacts, like the loss of agricultural lands, are clearly observed. Such incidents demonstrate that HPPs may have stigmatising impacts on the locations at which they are implemented.

When the cases of the Western Mediterranean Province are brought into greater focus, it appears that the local people, both the ones living in the villages and the ones living in

Fethiye, hold positive senses about their localities, with the exception of Söğütlüdere (at which the HPP was constructed eventually). Since the proposed construction area, which is within the former borders of national park between 1996 and 2009 (see Demir, 2011), is close to the national park, it is obvious that the basin represents an important natural reserve. Accordingly, the area is regarded as one of the most attractive tourist destinations of Turkey, where various activities such as camping, rafting and mud baths, are operated and employed by the locals. (Interviewees 3 and 11). In one of the videos about the region's HPP opposition processes, which was shared on the website of the 'Yuvarlakçay Conservation Platform', Interviewee 3 (2010) states that the region hosts roughly around 750,000 tourists annually. The villages close to the proposed construction site are also well known for their fertile agricultural land and greenhouse agriculture. In addition, well known historical sites can also be seen around these localities, such as Xantos, which was the administrative centre of the ancient Greek state of Lycia (classified as UNESCO World Heritage in 1988, see the General Directorate of Cultural Assets and Museums, 2015). All of these senses are thought of as being positive by both locals and outsiders, as indicated by local interviewees.

The proposed HPP site on the Kargı Stream is located in a remote and small village named Karacaören. The area represents a significant natural reserve, especially for the endemic *Liquidambar orientalis* trees. Furthermore, the livelihoods of the downstream villages of Kargı and Yanıklar depend heavily on water for irrigation, trout farms and maintenance of tourism facilities, which include eco-tourism cottages, boutique hotels and big 5-star holiday villages, located next to the stream's mouth. Interviewed locals also unanimously stated that they use the basin for their recreational activities like picnics. This can also be heard in the videos shot during the protests in 2011, which were uploaded on the Facebook group of 'Fethiye-Saklıkent Conservation Platform'. The Yuvarlakçay Stream, on the other hand, is regarded by the local interviewees as having high quality of drinking water. The locals highlighted that the stream supports the water needs of 14,000 people living within the basin, while also maintaining the unique and almost untouched ecosystem of the basin. This ecosystem features several forests that are characteristic of Mediterranean vegetation (see also Çobanoğlu et al, 2014). The region is also known for its natural beauty, which attracts tourists (especially for outdoor activities). Moreover, the area of construction, Topgözü-Pınarköy, is deemed as an important recreational area both by the interviewed-residents of

Pınarköy and for the locals of Dalyan, Köyceğiz, Ortaca and Göcek, which are towns close to the proposed construction sites (Interviewees 8, 12, 15 and 19).

However, compared to HPP cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay, Söğütlüdere represents a different story. The locals of Söğütlüdere (Group Interview 5 and 6) did not highlight the positives of their locality when interviews were conducted. This is mainly due to its mountainous nature, which confines locals' livelihoods, and due to its relative distance to the surrounding towns, city centres and villages. On the contrary, they frequently referred to the disadvantages of the village in their narratives. For example, they complained about the relatively poor opportunities of the region for agricultural production, due to the mountainous topography of the village. Instead of mentioning the positive senses of their locality, the locals showed their envy of the other villages. They pointed out that their village does not have endemic species like *Liquidambar orientalis*, or tourist attractions like those at Saklıkent, Yuvarlakçay and Kargı-Yanıklar (which, for these villages, were reasons why the proposed HPP constructions were stopped there, according to Group Interviews 5 and 6), while also frequently calling these villages as 'rich villages'. Thus, through the two group interviews conducted, as well as the observations undertaken, it was clear that the residents of Söğütlüdere did not have strong positive senses and place attachments to their locality, as felt in the other case areas.

Place stigmatisation, and in association place attachments, may explain these HPP processes with a different perspective by concentrating on the fears, worries and attachments of locals to their villages. In the cases of Saklıkent, Yuvarlakçay and Kargı-Yanıklar, the fear of losing the aforementioned positivities associated with these localities played an essential role in shaping the locals' reactions, while endorsing place stigmatisation as a pattern of environmental justice. In other words, the potential stigmatising impacts of the HPP constructions were applied by the locals of these areas when forming their reactions against the HPPs.

In the Saklıkent HPP case, the participants of Group Interview 2 from Demirler Village (see Chapter 4 for the villages visited during the field study, as well as Appendix II for the profiles of interviewees) explicitly highlighted that they are happy with their land and its fertility. They indicated that they had been against any potential HPP project, which might have taken their lands out of their ownership and damaged the environment. They also complained about

the potential rises in temperature and humidity expected in the region due to the small reservoir of the proposed HPP, which was also confirmed by the Group Interview 7 as one of the consequences of HPP constructions. The same concerns were raised by the participants of Group Interview 1 and Group Interview 3, held respectively in Eşen and Çukurincir villages, both of which lie on the same route. Here, the specific emphasis should be put on Çukurincir, since it is the closest settlement to the proposed project site. In addition to their worries about the potential damages to their agricultural production and their loss of agricultural lands through expropriation, they underlined that they feared losing their access to water (and a potential decrease in water flow), which their lives depend on. One of the participants explicitly reported that they were afraid of losing their existing conditions, like the availability of abundant irrigation water, and any potential retrogression of opportunities they enjoy due to the HPP constructions. These ideas signify the potential replacement of existing positives with negatives, while also implying the locals' attachments to these places.

The participants of Group Interview 4, who were against the Saklıkent HPP around Palamut Village (the second closest village to the construction site), indicated similar concerns. These people, who also have fertile fields and practise agriculture, were worried that their lands could be expropriated and flooded due to the small reservoir that the proposed project had. The hypothetical question one of them formulated during the interview, 'what are we going to do if we lose our land?', reflects these worries. They also stated that they were concerned with retrogression of their existing conditions through the HPP constructions, while underlining the vital roles of their lands for their livelihoods. However, at this point, it is important to specify that this village was unique compared to the surrounding ones. That is to say, it was claimed by a group of interviewees that the majority of the village's population was indifferent to the potential HPP project, while there are still a considerable number of people who are in favour of the construction. This is because of the negative senses that the village has for them, due to its mountainous topography, not enabling most of them to have large fields, and administrative complications about the location. These complications have led to the failure of the local administrations of both Muğla and Antalya to deliver infrastructure and services to Palamut for almost 60 years. The proponents of the HPP construction expected that their existing conditions could be improved if the company kept their promises to deliver services to the village. Participants of Group Interview 4 indicated that irrigation canals, constructed by the state around 60 years ago have never worked

properly, since they had been filled by the stones carried by water from the source of the river. This had ruined the pumps expecting to deliver irrigation water. For this reason, people living in the upper village have not had a chance to practise agriculture, unlike the occupants at the lower parts of the village, who can get water directly from the river. Two participants of Group Interview 4 said that the company had promised to repair and sustain these irrigation canals, in the case of locals' providing their consents for the construction. Interviewee 11 specified that the proponents were not fully convinced about these promises, as they learned that company would not pay for the electricity bills for the repaired canal. Interviewee 11, and one participant of Group Interview 4, also claimed that there was a mistrust of the company's capacity to repair a canal which had not been repaired even by the state for a long time. Eventually, the opponents mobilised with the other opponents of the previously mentioned villages of this basin and contributed to the cancellation of the HPP construction, while the proponents remained inactive on this issue, as clearly indicated by Interviewee 11. Above all, the positives associated with this village, also showing people's attachments to their place, had played a role in shaping people's opposition, while relative negativities led them to stay indifferent against the HPP, instead of backing it.

Interviewee 3, from the Aklar Village, in the basin, stressed the peculiarities and natural beauty of the region, which are the main reasons that tourists visit. He said that the locals are satisfied with the existing activities, centred on agriculture and small-scale touristic businesses such as restaurants, small-scale rafting companies and mud bath facilities. He confirmed the abovementioned worries due to the potential HPP construction, which in his opinion could irreversibly damage such advantages enjoyed by the locals.

All of these motivations, shaping HPP oppositions in Saklıkent, emphasise that the locals have concerns about the potential replacement of the positive senses of their places with the negatives. These negatives exist in the form of a potential decrease in water flow, damage on natural beauty, the loss of agricultural lands and loss of livelihoods. Above all they feared the potential deterioration of their quality of life and environmental integrity. From their emphases on such positivities of their places, it appears that the Saklıkent Basin has been misrecognised by the policy-makers and the company in this HPP process. This suggests a different pattern of environmental justice, when analysed through the concept of place stigmatisation.

In the Kargı-Yanıklar case, the locals frequently referred to the positive senses of the place. Firstly, similar to Saklıkent's locals, the people of Kargı-Yanıklar indicated their worries about the potential harms of the HPP, which could replace the positive senses of their place with negative ones. These worries can be generalised as the potential loss of water flow, which might decrease the amount of water used in irrigation and lead to a decrease of the fish population in the river, and the potential loss of agricultural lands through the expropriation process (Interviewees 2, 22 and 24). Interviewees 17 and 2 respectively argued such misrecognition and stigmatisation of their locality through HPPs as follows:

> 'This water is our water. We are struggling for not giving our lands away…***If there is no water, there is no life.*** You cannot practise agriculture or you cannot plant fruit trees. If water disappears, what are we going to do? We will have to migrate (Interviewee 17).'

> 'We have everything here. We have forest; we have sweetgum trees; we have sea; we have sand. This place is intertwined with water. Irrigation is performed, land is fertile… (Interviewee 2).'

Both of these statements demonstrate how water is essential for the region, and show the clear vision of a potential HPP construction in Kargı-Yanıklar as something that would take their water away from them and ultimately might prevent them from performing agriculture, as well as damaging the environment. In addition to these positive senses centred on water's role in agricultural production, there are also attributions to the positive senses specifically associated with the nature of Kargı-Yanıklar. For example, Interviewee 23 represents an exceptional case in explaining how nature makes positive senses on the locals, which could be stigmatised by the HPP constructions. He indicated that after living for a long period of time in the US, he decided to settle down in Turkey with his foreigner wife and children. They initially moved to Izmir, then later moved to this village. When asked about the reasons for his move, he said referred to the surroundings, composed of various fruit trees and forests as well as the stream, 'because of them, I dragged my family to here, because of the nature'. He maintained that if there were any attempts to construct an HPP, which would destroy this nature, he would be one of the frontrunners of a potential public opposition. Interviewee 2, on the other hand, supported this stance, and he also referred to the positive senses that the nature stimulates, which he and his wife think would be damaged through HPPs (as do the other local interviewees such as Interviewee 23):

> 'The environment is important for our lives. If the HPP was constructed, trees would be cut down, water would be polluted more, the stream would become emaciated more, fish population would

> decrease more…If only you see the upstream [of the stream, referring to proposed construction site]. It is tremendous nature. Plane trees, sweetgum trees…If the HPP was constructed there, they would all be gone. Either they would get drier, or they would be cut.'

Locals further emphasised that the basin is generally associated with the positive senses of nature, which, they believed, could be affected negatively through the HPP constructions. In addition to focussing on the environmental positives of the area, it is also necessary to underline how the proposed construction site itself holds positive senses for the locals, for their recreational activities. Interviewee 21, a person who migrated from city to that village, summarised this point as follows:

> 'At the proposed construction site of the HPP, children were swimming, it was a picnic place, and it was the eye of the water [a phrase used in Anatolia referring to 'source of water']. The HPP would make all of them a story of past. Ultimately, these things are the part of the lives of this region.'

Through this statement, which was also confirmed by the other interviewees of Kargı-Yanıklar, it can be claimed that the locals' worries about the loss of their recreational areas had a part in shaping their opposition against that construction. [29] In line with this discussion, it appeared that a potential HPP construction caused fears within the local community. They thought that the positive senses of their place would be replaced with the negatives. In the end, it was revealed that the misrecognition of their place (leading to a HPP being proposed there) are demonstrated by the locals' concerns about the potential loss of positivities. This was a significant motivation behind the HPP opposition in Kargı-Yanıklar, which can be classified as a pattern of environmental injustice when analysed through the concept of place stigmatisation.

The abovementioned worries of the local people regarding Saklıkent and Kargı-Yanıklar were also explicitly seen in the Yuvarlakçay case. All of the locals mentioned the importance of water, and the region, for their livelihoods, while also underlining their concerns about the environmental damage that the HPP construction caused (and would further cause). Perhaps because this case represents one of the earliest local HPP oppositions of Turkey, their

[29] There, I can also mention about a middle-aged local women I had a small chat in this area. Although she referred to another controversial project located around this village, which is a big marina project around the mouth of the Kargi Stream, rather than HPPs, her motivation strongly centres on the potential loss of a recreational area, where 'locals enjoy the beach and children swim', as she said. As I said, although she did not refer to the HPP, it is important to determine how the positive senses of the local environments in the form of recreational areas play significant roles in shaping people's perceptions.

formulation of the positive senses of Pınarköy, the closest settlement to the source of Yuvarlakçay, heavily depends on water itself. Interviewees 4, 10, 16, 18 and 20, and all others reprinted in Çobanoğlu et al (2014), highlighted that their livelihoods predominantly depend on water. They believed a disappearance/disruption of the water would deteriorate their life quality. In these interviews, they emphasised their reliance on Yuvarlakçay's water for drinking and irrigation; if this water was lost through the HPP, it could hinder their main livelihoods and basic needs. They also noted the stream's role in hosting numerous outdoor sports and nature tourism, which would also impact the livelihoods of the people who organise these activities from Dalyan (see also Interviewees 8, 12 and 19). Interviewee 10 is the owner of one of the trout restaurants along the riverside and can be classified as one the beneficiaries of the tourist flow. He stated that any potential HPP process could exterminate his business, which has a region-wide reputation (confirmed by Interviewee 15, living outside Pınarköy). They can generally be encapsulated through Interviewee 16's following comment:

> 'Our irrigation water is from there [referring to Yuvarlakçay], our drinking water is from there, everything we have is from there…6 villages and 1 town are fed directly from there. The total population of the basin is around 14,000 people, and that [Yuvarlakçay] is their all livelihood.'

In fact, it can be claimed that these fears (of losing the economic positivities of the place) were among the main motivations behind the opposition movement when the process is analysed, implying the stigmatising impacts of the HPPs as well.

However, it does not mean that the locals' positive senses for Yuvarlakçay were limited to economic issues. There were also social and environmental positives associated with Yuvarlakçay. Firstly, for the social ones, all locals interviewed in Yuvarlakçay and Dalyan explicitly mentioned the recreational importance of the proposed construction site for them. They reported that they organise picnics and go there to 'breathe' frequently, especially in the summer time. This was confirmed by a visit the site during a weekend in May; it was full of people, who were swimming and having picnics, most of whom were not inhabitants of Pınarköy. The potential HPP construction could ruin this opportunity for these people. Apart from that, the fear of migration as a result of potential loss of water flow was frequently emphasised by the locals, with the exactly same words as exemplified in the other cases (particularly Interviewee 16 and 18) in Chapter 6. This shows people's attachment and

positive perception of their current environment, which if it were to turn to a negative perception, might oust them from their settlements.

Secondly, the nature of Yuvarlakçay and the proposed construction site, can be considered as a part of their positive senses, the disturbance of which was deemed as a major reason of their long-lasted opposition. Apart from the locals' descriptions of their village, water and environment as 'heaven' or 'tremendous', there was a very simple incident experienced there, which transformed the opposition movement due to the usurpation of their positive senses of their environment. It was the midnight on December 15, 2009, when 875 red pine trees and eight monumental plane trees were cut down at the construction site for the HPP. This event transformed the previously small-scale demonstrations into 24/7 camping in the construction site to prevent further cutting, which lasted almost 11 months, until November 13, 2010. At this point the locals were assured by the company that the construction had stopped (Çobanoğlu et al, 2014, confirmed by Interviewee 31). As can be inferred from this anecdote, it was simply the disappearance of trees which further mobilised locals against the HPP construction by arousing the hypothetical question of 'if they cut these trees in the beginning of the process, what would they do then [to us and to the nature]?' This statement was frequently heard in the videos of demonstrations and camping (see Facebook page of YKP). In other words, the fear of the replacement of positive senses of Yuvarlakçay's nature with negative ones, as had happened in the beginning of the process, had an important role in shaping public opinion around the basin against the HPP. This example also demonstrates how the local communities can perceive the stigmatising effects of environmental policies as injustices. The HPP process of Yuvarlakçay demonstrates a convincing story of how positive senses of a place were overlooked or not recognised, in the HPP process, as a result of which the locals' reactions were shaped against process.

After the analyses of local oppositions against the HPP constructions, reflecting the place stigmatisation in the Western Mediterranean Province, there is one case, representing a completely reverse story. The perception of the locals towards it, has a different dimension of place stigmatisation. According to the Group Interviews 5 and 6, Interviewees 11, 13 and 22 and field observations, it can be said that the locals did not have strong positive senses about their locality and place attachments. In general, the locals did not discuss their village and their environment positively. When they talked, they were complaining about the

relatively poor agricultural production of their village, the lack of agricultural lands due to their mountainous location and the 'not particular environment' they have, which does not attract tourists as seen in the previously mentioned cases. Such attitudes of locals were notable when they reflected their envy of the other surrounding villages, which, for them, are socially and economically better off. Local interviewees indicated that when the HPP construction came to the village's agenda, there were some signs of opposition in the beginning, but in time, due to the potential costs of opposition as well as general indifference of locals on the HPP issues, they chose to negotiate with the company. As a result, the HPP was constructed by January 2014, since when it has been in operation. The locals, especially the *mukhtar* of the village, saw the company as an opportunity to improve the existing conditions of the village, and they reportedly agreed with the company on a certain amount of money. The company annually transfers this money to the village, which has to be used to meet village's needs for the time period that the HPP will be operating (Group Interview 5, see details in Chapter 8). It was a legal agreement for them, and they seemed happy with this settlement; they said that so far there were no perceived changes in water flow, nor was there any major environmental destruction during the construction at the time of the field visit.

Two more observations can be made about the Söğütlüdere case and place stigmatisation: the roles of the company's attitude and already existing stigmas. The company was the same one that was licensed to construct the Yuvarlakçay HPP. As a result of the controversial and highly-publicised HPP process introduced before, this company at least has learned its lessons from the Yuvarlakçay case, and has changed its attitudes towards the locals by recognising people and places in the process of Söğütlüdere HPP. There they conducted formal negotiations, resulting in a formal agreement, before they initiated the construction, although Interviewee 31 denied that there was such a change in attitude.

The existing stigmas or negativities associated with this village actually offers a different set of explanations for the issue of place stigmatisation, compared to the other cases. As discussed conceptually in Chapter 3, place stigmatisation also looks at how existing stigmas with a neighbourhood or a locality may make the installation of further stigmatising technologies on these localities easier. Locals' reactions about the Söğütlüdere case exactly match with this understanding. This process and the locals' own stories shows that the existing non-positive senses of locals towards Söğütlüdere opened a window of opportunity

for both locals (to improve their negative conditions through the financial aid offered by the company) and the company (focussing on the already negative senses that the villagers already had and tabling financial aid) in the process. This resulted in a settlement where both parties are currently satisfied. It is currently unclear whether the HPP will further stigmatise the locals and the place in the future. However, it appears that place stigmatisation, in a different form, emerged in the HPP process of Söğütlüdere.

In summary, the issue of place stigmatisation has been embedded in the HPP process of Turkey, instances of which can be seen in the cases of the Western Mediterranean Province. As analysed throughout this section, the cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay showed how HPPs would impact on the positives associated with a place by replacing them with negatives and causing fear and worries among the local communities. These cases overall reflected how these projects disregarded such positivities, making them relevant to an analysis of the recognitional aspects of environmental justice. In the Söğütlüdere case, however, where the HPP was constructed, it was seen that both the locals and the company benefited from the existing negatives or stigmas of the locality, which were taken as a window of opportunity by the both sides to attain their goals. Above all, this analysis showed that place stigmatisation (senses of a place), or the issues about the attachment of the locals to their locality (in which the interviewees of Saklıkent, Kargı-Yanıklar and Yuvarlakçay showed a greater degree of place attachment, as understood from the ways they described their places) should be parts of the HPP processes, since such an ignorance can be perceived as socio-environmental inequalities.

### 7.3 Recognition of Locality

The empirical side of this research can be furthered through examining to what extent ‘the locality’ was recognised in the HPP processes of the Western Mediterranean Province. This section divides locality into two parts as: recognition of local people, living around the proposed HPP sites, as referred in the previous parts, and recognition of local professionals and local administrations in the HPP process. The former will be succinctly analysed through public information processes in the case study areas, while the latter will assess whether the local professionals/experts and their knowledge/expertise on the HPP sites were recognised. This section focusses on the recognitional aspects of these issues at the case study areas.

Firstly, when assessing the recognition of local people in the HPP process, the public information meetings (if conducted) can be very useful. The fieldwork revealed that the public (referring to the local people living around the proposed constructions sites) had not been informed properly; this was raised by all interviewees of the research, even by the proponents of HPP constructions. They underlined that neither the state nor the companies informed them about the construction processes and the potential consequences prior to the implementation of the projects. They highlighted that the potential negative consequences of the HPPs were never mentioned in the cases involving information process; instead the state and company informed the public by organising meetings on how the proposed HPPs could contribute to the lives of the locals (Interviewees 3 and 11; Group Interviews 1, 2, 3 and 4). The participants of Group Interview 3 stressed that the company and state officials told them that the project would create job opportunities, and that it would not have any impact on the water flow and nature. They maintained that both officials and company representatives failed to answer locals' questions about expropriations and potential environmental damage in the public participation meeting. Interviewees 11 and 26 emphasised that it had been a group of volunteers from Fethiye and the surrounding cities and towns, who had visited villages and informed the local people about the HPP process, including their potential negative consequences. Interviewee 26 exemplified that he and his NGO, which is a local branch of a prominent national environmental NGO, delivered scientific information to the villages. This information was produced by scientists working for his NGO, regarding the potential degrading impacts of the HPPs. Information processes led by Interviewees 9, 11 and 22, similarly involved public talks given by the prominent academics regarding the issue, which were carried out in the villages. It is important to note that all these interviewees involved in these information processes emphasised that it was not their responsibility to inform the public regarding these issues; ideally it should have been conducted by the state and companies.

In addition to these problems regarding the lack of proper public information processes, there are other issues contributing to their misconduct. These include the short notice or limited announcements of the public information meetings, and the organisation of the meetings at places that are distant from the proposed project sites. These issues will be visited when these cases are examined in depth in Chapter 8 in terms of participative (procedural) environmental justice.

The recognition of local professionals in the HPP process can broaden the analysis and present a different set of inequalities that have been experienced in this process. The concerns of the local professionals regarding their limited- or non-recognition can be read through the centralised HPP process. In other words, this issue can be perceived as a legacy of modernist policies, which prioritise the technocracy and top-down policy implementations. These policies are inclined to govern policy-processes centrally, reflecting the common idea imposed on Turkish society that 'father state knows the best for its citizens' (see Adaman, Akbulut and Arsel, forthcoming) as also implied by Interviewees 6 and 28. For example, in these four HPP cases from the Western Mediterranean Province, these legacies can be best understood with the following statement of Interviewee 28: 'If DSİ approves a project, it is already appropriate', while he also stated that the DSİ knows (and does) the best for the Turkish citizens.

Professionals from different backgrounds criticised this tendency which excludes or limitedly includes local professionals and administrations into HPP processes of Turkey. They consider this tendency as one of the main reasons that the policies fail and lead to socio-ecological controversies, and, subsequently, local oppositions (see Interviewees 3, 6, 7, 26 and 27). For example, Interviewee 3, as an administrator of a village, indicated that 'if they take the opinions of the *mukhtars* and local administrations when they plan the projects, everything will be smoother and there will not be inappropriate projects'. This is supported by a local administrator of Municipality of Fethiye, Interviewee 7, as follows:

> 'Any stages of planning and construction of HPPs are asked to the local administrators of Fethiye or the relevant branches of state departments of Fethiye. It is all done from Ankara, from the desks…If these projects are discussed publicly at the local level before they are delegated to the private sector, I do not think that such troubles could be experienced.'

Interviewee 7, who is also a former-DSİ-engineer, underlined that even the DSİ's branch of Fethiye is not generally asked prior to the planning of the HPPs in this region. Interviewee 6, an engineer of the local DSİ branch, confirmed this, and he indicated that the headquarters of DSİ in Ankara centrally plans the projects. They can be, at some point, contributed by the regional branch of Aydın[30], where the branch of Fethiye's contribution was described as 'not

[30] DSİ's regional branch of Aydın is responsible for the operation of DSİ's policies in Aydın, Muğla and Denizli. Hierarchically, regional branch is in between headquarter in Ankara and local branches. Interviewee 6 clarified that they generally do not have direct contact with the ones in Ankara in the policy process.

much' by Interviewee 6. Such examples demonstrate that Fethiye's HPP processes reflect a top-down policy implementation, operated by the DSİ, with no or limited recognition of the local administrators in the process.

This discussion can also be furthered through the NGO involvement in the HPP process. Due to the centralised management of the HPP process by the Turkish state, local NGOs participation is also limited in Fethiye's HPP process, a point raised by Interviewee 26. This can be clarified through the examination of the role of Chamber of Architects in Fethiye's HPP process, which can be considered as a relatively more influential institution, holding more advantages than many of the NGOs of Turkey. For example, Interviewee 27, working in the Fethiye Branch of the Chamber of Architects, criticised the HPP process of Fethiye from the perspective of her occupational background by evaluating her NGO's participation into the process. She highlighted the master plan of Fethiye, 2011, which was planned by town planners located in Ankara, showing all potential development projects in a location, including HPPs. According to this plan, it can be seen that 18 new HPPs are planned for Fethiye on the abovementioned sites. She emphasised that the plan was full of inconsistencies and faults, since the local architects' and town planners' opinions were initially disregarded in the process. For instance, on the master plan, we can see a proposed HPP site on the highway (literally on the highway), showing that these documents are not prepared carefully. She clarified that there were not any consultations to her chamber, or local architects, when it was prepared in Ankara. They were later given a chance to appeal after the plan had been prepared and opened for consultations, however. It could be claimed that such a perspective simply reflects the 'Decide, Announce and Defend' mentality discussed by Llurdes, Sauri and Cerdan (2003) (see Chapter 3). Plans are created centrally, and the administrators actively defend these plans against outsider criticisms once they are publicised, instead of practicing inclusive policies from the beginning of the processes.

This section demonstrates that the HPP process of the Western Mediterranean Province does not recognise local villagers, local professionals or administrators. This can be seen through looking at public information processes, as well as by observing the contributions of local administrations and professionals to these HPP processes. This analysis is expanded through the next section, where the recognition of nature is explained by concentrating on the issue

of recognition of local environments; all of these details will be featured further in Chapter 8.

### 7.4 Recognition of Nature: Local Environments

As indicated by the relevant literature (see, for instance, Beck, 1992; Scott, 1998; and; Eckersley, 2004), modernisation processes, highly associated with the achievement of economic development and social progress, are inclined to disregard nature in the policy-making process. This is because nature is traditionally perceived as the servant of the states in attaining these modernist objectives. Turkey's modernisation process provides an ideological explanation of the formation of the current socio-ecological inequalities experienced in the country's HPP process. Due to the modernist legacies of centralised and top-down policy implementations and constant reference to the nature's role as raw material in the development process by the state, nature has been subordinated in favour of realisation of modernist goals. This misrecognition, accentuating dominant/subordinate relations, where nature is dominated through developmentalist policies, can be observed in the country's recent HPP cases. This, above all, triggers the formation of new socio-ecological inequalities.

At the national level, the misrecognition of nature in the HPP process can be exemplified by investigating how state institutions make use of nature and consider it in the HPP process. In June 2013, there was a mass demonstration against the potential construction of a shopping mall in İstanbul's Centre, Gezi Park, where thousands of people demonstrated against the urban renewal policies of Turkey (replacing greenspaces with concrete). Since then, the rhetoric of the officials has confined environmental issues to 'trees' and 'green', rather than promoting a complex understanding of environment (see, for example, Özkaynak et al, 2015). Since then, for instance, when the Minister of Forestry and Water Affairs talk about the HPPs and relevant protests, he frequently underlines that 'we require the plantation of five trees if one tree is cut down' (Eroğlu, *T24*, 2014). This perception can also be seen at the public level, through the following statement of a DSİ engineer (Interviewee 6): 'A person, who has never planted a tree, claims that s/he is an environmentalist. Most probably, I have planted 1500 trees in my life. I care about trees. While we, as DSİ, strive to make dry areas greener, are they [HPP protesters] counted as environmentalist?' From these statements, it seems that at the official level, the complexity of nature, its interests and specific needs, are

not particularly recognised. They liken the environment merely to trees, and demote environmentalism into a very limited approach revolving around the protection of greenspaces.

The inadequacy of the official environmental data and inventory reflects how nature is mistreated during the HPP processes. Interviewees 21 and 1 indicated that the official environmental data is quite limited. They highlighted that the basic environmental inventory and monitoring works are not conducted properly by the state, as witnessed in the visit to DSİ on November 2014. It can be elaborated through Interviewee 21's following statement:

> 'Nature is not considered [in Turkey's HPP process]. Environmental inventory and monitoring do not exist. The relations between species, humans and nature are not known; they are not taken into consideration. We want to be informed, but there is no inventory.'

Similarly, Interviewee 7 stated that the hydrologic data used in the planning of the HPP process are outdated and they require to be regularly updated, since one of the main reasons of leading to controversial HPP projects is this lack of up-to-date data and centralised management patterns depending on the outdated data. This lack of up-to-date data and environmental information indirectly disrespects nature's needs, interests and complexity. The issue of 'minimum flows', referring that companies have to let minimum 10% of the water flow when they operate the small-scale HPPs can provide a good example of this. Accordingly, Interviewee 7 argued that:

> 'Why is it [minimum flow] indicated as 10%, but not as 9% or 11%? In my opinion, even the statement of the 10% minimum flow shows that the nature is not considered seriously…If you investigated the nature seriously, you would say 12% is necessary to sustain to natural life or 8%, [depending on the region's peculiarities].'

This statement displays the state's approach in the HPP process. It hints that the development-oriented policies, like HPPs, consequently put the environment, needs and the interests aside. Up-to-date data, which are needed to mitigate, detect and address environmental issues, remain inadequate, since even basic studies such as inventories and environmental monitoring are neglected in this process.

These concerns can be empirically furthered through the HPP cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay. These examples demonstrate the state's perception of nature when implementing environmental policies. Economic development is prioritised at the

expense of environmental protection, along with modernist notions. One of the features of Saklıkent Valley and the proposed project site was that the area was located inside the borders of Saklıkent National Park. These borders were narrowed in 2009, however, prior to the HPP debate, by removing the proposed project site from the boundaries of the national park (Demir, 2011). The demarcation of an area as a national park means that the area is naturally significant reserve. This proposed site was within these borders, indicating that the site represents a significant ecosystem that needs to be protected. However, the nature of the Saklıkent HPP site was overlooked in the HPP process by opening it for construction. This could harm to the proposed area, and even the areas included within the new borders of the national park, since it might influence the water flow supporting the nature in this area. In addition, as argued by Öngür (2011), the geological formation of the basin and its flora and fauna, including endemic species, were completely disregarded in this HPP's planning process. He added that the calculations, data and assumptions used by the company were flawed by exemplifying that it is impossible to leave the 10% minimum flow equal to 0.2 $m^3/s$ to the river bed, due to seasonal differences and the geological formation of the river bed, limestone, known for its permeability. All of these issues point to a clear ignorance of nature and its peculiarities, needs and interests in Saklıkent's HPP process.

For the Kargı-Yanıklar case, the misrecognition of nature is demonstrated through the location of the proposed HPP site, which was a reproduction corridor for the endemic species: *Liquidambar orientalis*. As hinted earlier, *Liquidambar orientalis* is among the endemic species that Turkey has been committed to conserve, due to its commitment to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). The Kargı-Yanıklar basin, and particularly the proposed HPP site of Karacaören, represents the main habitat of this species in Turkey. Its existence significantly requires high phreatic ground water, according to the expert report used in the court process of this case. The expert report particularly underscores that the HPP construction and its operation would decrease the level of phreatic ground water in the medium term, which would make these trees dry. Furthermore, the expert report, and local interviewees such as Interviewees 2 and 17, clearly revealed that the population of *Liquidambar orientalis* has been decreasing despite conservation attempts, and would be irreversibly affected if the HPP construction were completed. Furthermore, the Ministry of Environment and Urbanisation (2014) indicates that the majority of the Kargı-Yanıklar basin is classified as Special

Environment Protection Areas, which also further emphasises the environmental peculiarities of the region, and highlights Turkey's commitment to provide further protection for the area. The Kargı-Yanıklar HPP case surely represents an interesting case that clearly shows that nature's peculiarities, needs and interests have been ignored during the HPP process. This was cemented through the court decisions stopping the construction (see Chapter 8).

In the Yuvarlakçay case, nature's subordination can be analysed more comprehensively. Similar to the analyses of Saklıkent and Kargı-Yanıklar, parts of which are also within the Special Environment Protection Areas (ÖÇK, Turkish acronym), the project site is located within the borders of an ÖÇK. This means that the region is ecologically important and needs to be protected, as defined by the Ministry of Environment and Urbanisation. This statuses was granted in compliance with the 1976 Barcelona Convention (Convention for the Protection of Mediterranean Sea against Pollution), an international convention that Turkey is part of. The convention reflects 'Specially Protected Areas and Biological Diversity Protocol' of the convention at the national level. The Yuvarlakçay basin and the construction site host several endemic species and forests, the while Yuvarlakçay Stream is the key water source for these ecosystems. From the HPP process, it is inferred that this convention was not respected. As indicated above, during the initiation of the construction, hundreds of trees, including eight monumental plane trees, were cut down. The statuses of these trees were granted by the Muğla Council of Protection of Cultural and Natural Properties under the Ministry of Tourism and Culture in 2003, as a nature conservation area (seen in the original copy of the document, filed with the author). Furthermore, more trees were under the threat to be cut. This was a clear sign of the subordination of nature and its peculiar status. In addition, in support of the argument underlining the lack of up-to-date data and environmental information, the data applied in the project by the company was miscalculated, which indirectly ignores the needs of nature. For instance, in the project file, the flow of Yuvarlakçay was fixed to 5 $m^3$/s annually, however this was only seen at the peak winter season. The average flow was actually 3.5 $m^3$/s (see Chapter 4). This means that company's calculations depended on a 'false' annual flow, which could hinder the release of the necessary amount of water for the maintenance of the ecosystem. The actual flow was lower, and this might eventually lead to the emergence of environmental problems.

In Yuvarlakçay case, another sign of the misrecognition of nature is hidden in the local tales about the source of the brook. This which was also cited in the final verdict, ruling against the HPP construction. Interviewees 4, 8, 10, 12, 16, 18 and 19 reported that the name of the source, Topgözü, which can be directly translated as 'Eye of the Canon', refers that Yuvarlakçay had not flowed for a while. When Ottoman bureaucrats subsequently visited the region and let the groundwater flow by a cannon shot, the name of the place became Topgözü. In the court decision outlawing the HPP construction, it was technically cited as follows:

> 'due to the construction…there is a danger for water source at the water collection basin to flee to the neighbouring valleys due to the reverse pressure, which is expected to impact negatively on the canyon's hydrological and morphological structure as well as drinking water needs of the surrounding settlements…'.

This court decision, formulating the disappearance of the water of Yuvarlakçay in a scientific way, essentially highlights the complexity of the ecosystem, which might cause domino effects on the nature that both the company and state neglected when the operation permissions and licences were issued and project was planned.

In conclusion, this section demonstrated that nature's peculiarities, complexity, needs and interests have not been recognised in the HPP processes, as clearly seen by examining HPP cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay. It showed that even highly peculiar and significant environmental reserves, including a national park, habitat of endemic species and ÖÇKs, have been subordinated at the expense of HPP constructions. Although whether the nature should be part of the justice community or not is traditionally challenged in the environmental justice literature, it is seen here that it actually has to be, since non-recognition leaves nature 'injured, its interests ignored, autonomy dismissed, or its integrity damaged' as indicated by Schlosberg (2007: 139) and exemplified through these HPP cases.

## 7.5 Conclusion

This chapter drew attention to recognitional issues in analysing environmental justice in Turkey's HPP process. The main concern was to reveal if local people, experts/administrators/professionals and nature were recognised, and to identify if their particular needs, interests and peculiarities are included in the HPP process. Recognitional issues are inseparable parts of justice studies, which deepen the understanding of socio-environmental inequalities. Turkish HPP cases generally do not bring a way of analysis provided in the existing environmental justice literature. The field results revealed significant socio-environmental inequalities when the data were classified through place stigmatisation, recognition of locality and recognition of nature.

The concept of place stigmatisation showed how senses of a place are important and relevant as a matter of socio-environmental inequality, while also bringing the issue of place attachments to the table. Accordingly, field data from the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases clearly demonstrated that local communities have perceived the potential replacements of positive senses of a place with negative ones as justice issues. In these cases, this potential replacement was feared through the installation of stigmatising technologies (HPPs). It has been implied that such potential replacements have played a vital role in shaping public reactions against the HPPs. This data also highlighted that the way locals described their locality revealed their attachments to these places, which were frequently implied when they were talking about their oppositions to the abovementioned HPPs. As carefully noted above, the Söğütlüdere case presented the exact opposite of this, yet this case showed different aspects of the place stigmatisation. The already existing negativities of Söğütlüdere Village have made the installation of a HPP easier in this case, since locals had hoped to overcome/mitigate the village's negativities through the annual payment offered by the construction company. All of these cases eventually documented that senses of a place and place attachments are too significant to be neglected in environmental policy-making process. Ignorance towards these issues can be classified as a socio-environmental inequality, when analysed through the concept of place stigmatisation.

Following place stigmatisation, the issues regarding the recognition of localities were further revealed in this chapter. All interviewees, regardless of their opinion of HPPs, unanimously

underlined that they were not properly informed about the HPP process, a point that has direct relevance to the recognitional dimension. Accordingly, improperly managed public information processes (and their non-existence) reaffirmed that these processes have failed to recognise the local communities. In addition, the local professionals'/experts'/administrators' roles and recognition in HPP processes deserve attention. Because of the fact that these people are familiar with the construction sites, cultures, nature and socio-economic dynamics of the different localities, an ideal HPP process would recognise them and their knowledge. As presented above, due to the centralised and top-down characteristics of the HPP process, the interviewed professionals, local administrators, local servants of DSİ, lawyers and NGO representatives unanimously stated that they were not encouraged to participate in these processes. This analysis showed that the non-recognition of these groups in the HPP process could be regarded as a socio-environmental inequality.

As argued throughout this research, environmental justice is not only about humans; it also focusses on the question of 'justice to nature'. In that sense, the recognition (or lack of recognition) of nature and its peculiarities, complexities, needs and interests in the HPP process can be analysed. For this research, it appears that nature has not been recognised. The Saklıkent basin represents a national park; Kargı-Yanıklar is known for its endemic *Liquidambar orientalis* species, and Yuvarlakçay, together with the Saklıkent basin and majority of the Kargı-Yanıklar basin, is legally protected as an ÖÇK region. Despite this protection, attempts were made to construct HPPs on all of these sensitive ecosystems. As HPPs are a stigmatising technology, nature and its peculiarities, complexities, needs and interests, have not been recognised. As a result, this issue emerges as a justice issue in this research.

The HPP processes of Turkey are closely associated with the recognitional dimensions of environmental justice. This data suggested that the recognitional issues experienced in the HPP processes have been influential in shaping them and the socio-environmental transformations caused by them. These issues will be further clarified in Chapter 8, which analyses the participative (procedural) aspects of environmental justice.

# CHAPTER 8: EVIDENCE III: ENVIRONMENTAL JUSTICE AS PARTICIPATION (PARTICIPATIVE OR PROCEDURAL JUSTICE) AND HPP CASES OF WESTERN MEDITERRENEAN PROVINCE

## 8.1 Introduction

This chapter introduces 'evidence' on the third inter-related dimension of the concept, procedural justice (also referred to as participation and participative justice in the literature). As shown in Chapter 3, relevant literature of procedural environmental justice is a broad one, centred on the analyses of public participation in environmental decision-making processes. This body of literature also brings issues like enforcement of environmental laws, access to information, transparency, accountability and access to legal processes into the agenda. In that sense, authors like Hunold and Young (1998) and Shrader-Frechette (2002) highlight the deliberative democracy in addressing procedural inequalities experienced in environmental decision-making processes. Additionally, and rightfully, Aarhus Convention is focussed on by scholars such as Mason (2011), Di Santo (2011), and Walker and Day (2012) as the key way to pursue procedural justice in similar processes. Despite the fact that these contributions cannot be disregarded and that they will definitely improve the state of procedural environmental justice once fully-attained, they cannot be used to judge the Turkey's HPP process due to the following reasons:

1- As stated by Hunold and Young (1998), deliberative models of democracy in environmental governance fit to only a handful of counties. Above all, deliberation and its idealised implementation seem to be Western-centric. Implementation of them as the reference point of justice in non-Western contexts including Turkish HPP cases may prejudice the potential analyses.

2- A similar issue can be argued for the Aarhus Convention and its main principles. As Turkey has not signed and ratified the Convention, using its principles as the criteria of procedural environmental justice would bias the analysis. Furthermore, the ratification of this convention cannot shed light on the inequalities caused by the existing social and administrative structures. For instance, by ratification of the Convention, Turkey may legislate more transparent processes in environmental

governance, yet they would be suspicious if they eliminated the modernist legacies inherited in Turkey's policy-making processes (see Chapter 2) and provided environmental justice. This generalisation comes by glancing at the parties of the Convention such as Central Asian and Caucasian countries and Balkan nations, which ratified the Convention in 2000s; yet ranked lower in the Transparency International's rankings by 2015 (Transparency International, 2015).

Instead of limiting the analysis to such principles of procedural justice and bias, a more open-ended approach should be pursued in this work. When the fieldwork was completed and the bulk of the data were obtained, all these issues were detected. The narratives of interviewees and the analysis of existing official and professional documents have unearthed stories such as public participation, access to information, access to legal processes and the enforcement of existing environmental laws in Turkey, among others. Instead of complicating the analysis by examining these notions separately, the field data have provided a broader perspective, covering a highly-relevant procedural issue experienced in the HPP processes of the Western Mediterranean Province of Turkey: Meaningful Participation.

The concept of meaningful participation inherently carries the main assumption of the procedural (environmental) justice, asserting that fair processes are likely to lead to fair outcomes. Despite the concept's relation to the deliberative models, it is not too idealistic or Western-centric, since each country/community may have an understanding of meaningful participation, which is not necessarily centred on deliberative democracy and/or the principles of Aarhus Convention. Instead, as seen in environmental justice literature, meaningful participation may provide a more contextual outlook to the issues spotted during the fieldwork. For instance, Solitare (2005) highlights that her implementation of the concept stays within the limits allowed by the US legislation and individual state's legislation. A similar approach can be taken for this research. Accordingly, along with the field findings and comprehensive analysis of the legal framework of Turkish HPPs, it appears that local populations expected a degree of meaningful participation, as indicated by Solitare (2005) and US EPA (2015), within the limits of Turkey's legislative framework. For this research, along with the results of interviews, narratives, and videos about the HPP process of the Western Mediterranean Province of Turkey, the conditions of meaningful participation can be considered as follows:

1- Consideration/inclusion of locals into the policy processes;
2- Representation of their concerns/recommendations in the policy process;
3- Ability of them to influence the policy process;
4- The efforts of state institutions/administration to ensure public participation.

These conditions have similarities with the lists suggested by Solitare (2005) and US EPA (2013). When the general HPP process of Turkey and the relevant legal framework of HPPs are uncovered, it is possible to see the instances of these four components of the meaningful participation. For example, the EIA by-laws (2003, 2008, 2013 and 2014) underline that companies whose projects fall under the Annex I of the by-laws are required to conduct public participation meetings and reflect the locals' concerns/recommendations in their final project files to obtain the EIA clearance before they initiate HPP constructions. This straightforwardly implies that the by-laws urge companies to include local communities into the HPP process and encourage them to raise their voices. In doing so, the by-laws explicitly aim to achieve the representation of locals' concerns/recommendations in the HPP process, and pave the way for the locals to influence the policy process. The same by-laws also require the state agencies to monitor the conduct of those public participation processes, which suggests that the state has to ensure their proper conduct. Above all, as revealed further in the following sections, an understanding of 'meaningful participation' is not too Western or idealistic in the Turkish context. In fact, the notion was frequently referred to in the narratives of interviewees, and was detected in the relevant legal, official and organisational documents.

Through analysis of procedural environmental justice through the ecological justice perspective, meaningful participation can be examined from nature's perspective. Once again, it is the same legal framework of HPPs in Turkey, implying the necessity to protect nature and consider its needs/interests in the policy processes. The state's role in the nature conservation is also baldly highlighted in the numerous environmental acts as implied in the following sections. Accordingly, the proxy-representation of the nature in the policy process is legally emphasised. This enables the dissemination of the four components of meaningful participation towards nature by introducing the 'meaningful participation of nature'.

In line with this information, meaningful participation would help to reveal numerous procedural justice issues experienced in the HPP processes of the case study areas. It would also shed light on the main assumptions behind the procedural justice, that the fair process is

likely to lead to fair outcome, which is widely accepted within society. For the rest of this chapter, the issues identified by locals regarding the procedural aspects of HPPs (during field visits) are analysed through meaningful participation, since their narratives relied on the issues like the degree of their inclusion into the HPP processes, the representation of their concerns in the HPP process, their ability to influence the policy process and the state's (and the companies') efforts to include them to the HPP process. While analysing the field results, these four components of meaningful participation help to reveal whether the nature meaningfully took part in these processes. Subsequent to this short introduction, the following sections will analyse the HPP processes in the Saklıkent, Söğütlüdere, Kargı-Yanıklar, and Yuvarlakçay cases in terms of the meaningful participation of local communities and nature.

### 8.2 Saklıkent HPP and Meaningful Participation

To analyse the HPP process of Saklıkent, it is first necessary to look at the planning and tendering and licensing processes to have initial analysis of the meaningful participation of local communities and nature. The proposed HPP was licenced in December 2008, and the licensed-company convened the two EIA-bound meetings in the villages neighbouring the construction site in April 2010 (see Demir, 2011). This shows that this HPP had already been projected, applied, evaluated, approved, and licenced before December 2008, since these steps need to be completed prior to licensing (see the 2003 By-Law). A water use rights agreement between the state and company had also been signed before this date, according to the By-Law (2003). This implies that the majority of the process required for the above steps were undertaken without public participation. Accordingly, it can be stated that the state institutions and company were the only participants of the majority of this HPP process.

It can be claimed that the local community was, in theory, included into the HPP process during the EIA phase. In the Saklıkent basin, there were two EIA-bound meetings conducted by the company before it attempted to initiate the construction, since this HPP falls under Annex I of the EIA by-laws (2008, 2013, 2014), requiring the company to obtain an EIA clearance by going through an EIA process. As introduced before, the first element of meaningful participation is determined as the consideration of local communities and their inclusion in the policy processes. To evaluate whether the locals were included to the HPP

process or not, and the degree of representation of their concerns and recommendations, it is essential to analyse how they were informed about the process and the EIA meetings.

The participants of Group Interview 1 at the Demirler Village claimed that it was their *mukhtar* who mentioned the potential HPP construction around the village. They maintained that the *mukhtar* had immediately communicated with the volunteers in Fethiye, namely, Interviewees 9, 11, 22, and 35, as a result of which they had initiated the legal struggle. These participants reported that locals came across the company employees when they were reportedly conducting feasibility measurements in the area prior to the construction process (Group Interview 1). Interviewee 11 clarified this by saying that the *mukhtar* coincidentally encountered with the company representatives, who he had known from the EIA meeting (the first meeting detailed below), and they had a confrontation there, after which *mukhtar* took a proactive role against HPPs in his village.

In the Group Interview 2, conducted in the neighbouring village, Eşen, the EIA-related meeting was indicated as the first occasion where locals were officially informed about the potential HPP construction. This meeting was mentioned particularly in Eşen, which may be because the first EIA meeting was convened in this village, the participation of which was 'high' according to Group Interview 2. They also maintained that people from neighbouring villages also showed interest in this first meeting, as concurred by, for example, the participants of Group Interview 1. The participants of the Group Interview 2 claimed that the meeting was 'tense'. The informants were nervous, and the locals became nervous when the informants refrained from disclosing the potential harms of the HPP construction, according to them. One of the participants of Group Interview 2 also specified that the officials from DSİ and EPDK present in that meeting sided with the company, which further annoyed the locals. [31]

The second EIA meeting was conducted one day after the previous one in April 2010 in Palamut Village, where Group Interviews 4 was conducted. The participants of Group Interview 3 stated that they (and other people from that village) attended this meeting, and the informants constantly told them that the village would not be damaged, and that the

[31] According to the EIA by-law, state institutions should monitor the meetings, it is the reason that these officials were present in that meeting. Here the participant refers that the state representatives were backing the company's arguments during the meeting, which annoyed the locals.

minimum water flow (10% as determined by the water use rights agreements), would always be assured by the company. No reference was made to the potential harmful impacts of the project. The participants of Group Interview 4 emphasised that the company promised them to repair their irrigation canals, which had not been repaired and activated by the state for over 60 years. The participants also highlighted that the landowners, whose lands would be expropriated and inundated by the small reservoir associated with HPP, were not offered any alternatives.

These two meetings were not the only ones conducted for the potential HPP construction in Saklıkent, however. Interviewee 3, the *mukhtar* of Aklar Village in the stream's basin, mentioned another meeting undertaken in Kaş, which is around 50 kilometres away from this village. He said that a state institution conducted this meeting in November 2011, where the benefits of the potential HPP constructions were narrated to the participants of that meeting. Videos of that meeting (see Facebook page of FSKP) confirm his account. It is important to note that this meeting was not undertaken within the EIA process. According to Interviewee 3, in this meeting, the recommendations of the local people were immediately 'opposed and repelled' by the officials. He maintained that the entire meeting was based on notions of the 'commercial benefits of HPPs' and 'their contributions to the villages', while these benefits were 'not persuasive', 'quite rhetorical', and 'not bound to any protocol'. Like the majority of the participants of the group interviews cited above, Interviewee 3 also highlighted that it was the volunteers who actually tried to inform the locals about these projects, and provided a more convincing account of the whole HPP process. As a result, the locals committed themselves to conduct protests and initiate the legal struggles against the HPP.

All of the data presented up to this point has demonstrated that the HPP process and the relevant legal framework did ostensibly include locals during the EIA process, after the completion of planning and licensing. However, from the narratives of these interviewees, it appears that the locals were informed late and improperly. The potential negatives of the HPP were concealed from them, and no alternatives were offered to the villagers apart from the limited expropriation fee (see Chapter 6). Most importantly, as Interviewee 3 clearly indicated, the informants undermined the comments and recommendations of the locals during this process. This was confirmed by the other group interviews when they described the EIA process. Accordingly, it could be said that the locals' inclusion/recognition in the Saklıkent HPP process was limited, consisting only of the EIA meetings. Furthermore, the

representation of their concerns/recommendations was not ensured in this process, as implied through the interviews cited above.

From this point, the analysis can be stretched into the third element of the meaningful participation, which is whether the local community was able to influence the HPP process. It can be purported that locals were able to assert their concerns in the HPP process, but not through the EIA meetings and legal framework of HPPs supposed to ensure their participation. Instead their participation in the pre-construction process of the HPP was made meaningful through alternative ways. As concurred by the local interviewees, they unilaterally organised a series of activities to raise awareness on the potential HPP issue of Saklıkent at the local level, which were also publicised at the national level. Interviewee 3 narrated these activities. He recounted that demonstrations were initiated, when the scientists and volunteers from Fethiye informed them about the potential harms of the HPPs. The *mukhtars* of the basin then collaborated with each other and let each other know about every single development regarding the HPP issue, while also they used their contacts in the local branches of the ruling party to transmit their concerns about the HPP process to the high-levels in Ankara. Their actions are confirmed by the participants of Group Interview 4, in which one of them highlighted that they even attended to a national scale protest in Ankara on the HPP issues as the representatives of the Saklıkent HPP resistance, to make their cause visible at the national scale.

Meanwhile, at the local scale, marches, protests, informal public information meetings, and picnics were organised by FSKP (see the Chapter 4; the copies of the calls of these activities are filed with the author). In addition, the above-mentioned villages also managed to collect the necessary amount of petitions, and initiated court cases to stop the construction of the Saklıkent HPP. For example, the EIA clearance, granted in 2012, was cancelled by a court decision in April 2015 (The court decision is filed with the author). Other cases were never concluded since the company officially stepped back from the HPP project on December 2013 due to the public opposition (*Evrensel*, 2013). All these attempts demonstrated that the official EIA process, which is supposed to lead to meaningful participation of the locals to the HPP process by including them to the process, representing their comments/recommendations about the HPPs, and providing them necessary conditions to participate in the process, failed. Hence the locals followed alternative ways like protests and legal struggles to influence the HPP process.

By analysing these protests and legal struggles, the fourth element of the meaningful participation, which examines the state's/administration's efforts to ensure locals' participation can be assessed. Instances of this component can be found in the pre-construction and construction stages of the HPP. It can be seen here that the locals did not face pressures and/or obstructions by the state institutions. However, state institutions did not pay much effort to ensure their participation as well. At least, by examining locals' claims on the EIA meetings in the previous paragraphs, it can be seen that the participation of locals was not practically achieved, and the process was not managed properly. For this HPP case, there is not much thing to say about state's efforts to ensure public participation, which is implied in the process itself, but it can be clarified by the anecdotes provided by two volunteers from Fethiye, who took part in this HPP process and attended to these EIA meetings. Accordingly, Interviewee 9 describes the EIA-bound meetings convened in this basin as follows:

> 'They announced the meeting there [referring to the first meeting conducted in Eşen] at a newspaper distributed in Muğla [referring that the locals may not have access to that newspaper since it is distributed in a limited area], so it is obvious that they try to conceal something. Once we went there, we slowly understood. The man in front of us was an engineer, the company employee. [He was] very annoyed, very nervous. He had a chewing gum in his mouth, he was talking slowly. [We asked] how many trees will be cut? He does not know. How much excavations will be carried? He does not know. How long will the construction continue? He does not know. So, there is a trick there…He said like we will do this, nothing is going to happen, in fact, the water will rise a little bit, nothing else will happen etc.'

Interviewee 11 also describes these meetings:

> 'We attended [to those meetings]. Once we thought that these meetings may be beneficial, it was the first meeting. We were thinking that the signatures collected there and discussions held would lead to a right outcome. We, then, learnt it by experience, EIA meetings are used by the companies in the legal processes to justify that they actually informed the local people. It is ostensible. We learnt how these reports and discussions held there were ostensible as follows: Many of these meetings are conducted under the supervision of the Ministry of Forestry [and Water Affairs]. We saw that the official reports do not reflect the complaints done there, on the contrary, we saw that the language of these reports are quite affirmative [of the project]. In fact, in one of those meetings, I asked a copy of the official record, which NGO representatives and/or *mukhtars* may ask it on behalf of the participants, the guy did not want to give it…For this reason, we witnessed that at many places, public servants act maliciously in favour of the companies. We realised that these meetings are not useful.'

The anecdotal accounts and group interviews reviewed above affirmed that the processes supposed to ensure the public participation were not adequate enough to convince people. On the contrary, they led to further suspicion about the HPP project in the local people's minds. In addition to these information, Interviewees 9, 11, and 26 also praised the efforts of the *mukhtars* of this basin in the HPP process. They highlighted that all of the *mukhtars* stuck together, even when the company tried to approach them individually to negotiate about the process (confirmed by Interviewee 3, who is one of these *mukhtars*, in addition to the group interviews cited above), and mobilised their subjects in all these processes. Since all of them shared the same cause, their stance was solid against the HPP construction. The opposite example can be seen in the following case studies of Söğütlüdere, Kargı-Yanıklar, and Yuvarlakçay, where the reluctance of the *mukhtar* to take part in such processes actually complicated the process. This is important, because, in traditional Turkish rural life, if you want to do anything at the villages, or if you want an access to any villages, you should first talk to the *mukhtar*. For this reason, the companies generally try to persuade the *mukhtar* before they initiate the constructions, as indicated in a series of interviews, including Interviewee 28, a DSİ servant.

The similar analyses can be extended towards the meaningful participation of the nature. By issuing relevant legal frameworks of nature conservation, the state actually ensures its proxy-representation. This also develops a framework to respond its existing/potential 'communication' by introducing limits and rules on the activities centred on the nature (indicating that nature has a degree of ability to participate in the process, see Chapter 3 for details). In addition, it is mainly the state's duty to ensure this proxy-participation through the legislations and their implementation, all of which makes the extension of the notion of meaningful participation to nature possible and relevant to the analysis of procedural aspects of justice in the HPP processes. Here, for the Saklıkent HPP case, this point can be clarified through the examination of the Law on the Protection of Natural Parks (1983), which introduced strict measures to protect areas declared as national park including the Saklıkent Valley. The 2010 amendments on the Law on Utilisation of Renewable Energy Resources for the Purpose of Electrical Energy Production (2005), is another good example, it enables the construction of renewable energy plants on a series of protected areas, including the national parks.

The 1983 Law demands nature's consideration as an actor in the policy process, while its scope also ensures its representation in the relevant processes by imposing a series of rules and sanctions to protect these areas. Interviewee 11 claimed that the 1983 Law is strictly implemented, which has even caused unjust treatments against locals living closer to these areas. It has, for example, limited the mobility of inhabitants of the Saklıkent Valley. However, when it comes to the HPP process, the participation of nature is marginalised in the Saklıkent HPP process. In this case, it was on October 12, 2009 the Cabinet decided to narrow the borders of the Saklıkent National Park (Demir, 2011), but its peculiar geomorphological characteristics remained as a protection area, even after the national park's borders were narrowed down (see Interviewee 11; see also Ministry of Environment and Urbanisation, 2015a). Again, according to Interviewee 11, this decision eased the implementation of the Saklıkent HPP, which was licensed on December 2008 (see EPDK License Investigation Database, 2015), as the proposed construction site was in the area that was now outside of the national park borders. Although the aim here is not to associate this decision with the licensing, the decision coincidentally worked in favour of the Saklıkent HPP construction. It may even be claimed that the approval of the EIA report for this construction on December 2011 would not have been approved if the borders of the national park had not changed (see Öngür, 2011 for the critique of the EIA report). It can be further claimed that this border change; merged with the 2010 amendments of the 2005 Law on Utilisation of Renewable Energy Resources for the Purpose of Electrical Energy Production, have led to the introduction of more potential HPPs (seen in the master plan of Fethiye, approved in 2012, a copy is filed with the author).

The 2010 amendments enabled the construction of renewable energy facilities, including HPPs, on nature conservation areas including national parks, with the approval of the Ministry of Energy and Natural Resources. According to the master plan, and Demir (2011), 22 more HPPs are projected on the Eşen stream, which is the main water source feeding the Saklıkent Valley. These developments imply that Saklıkent's nature, once protected and represented in the policy processes, has been undermined, and its proxy-participation has been hindered through loosening the implementation of the legal framework. This is seen in the Saklıkent HPP case when it is discussed under these legal frameworks. It also appears that by issuing such exemptions for the sake of ensuring HPP constructions, the state

negatively acted at the expense of nature in the Saklıkent HPP process, where even a national park became a projected construction site through the legal changes.

In summary for the Saklıkent HPP case, the company and the state did not do much to reflect the locals' concerns in their projects, and did not disclose the potential harms to the locals through the entire process. The full participation of the local people in this process was not attained, which led to the negligence of their concerns and recommendations in this process, hindering their meaningful participation. As understood from the two anecdotal extracts of the previous paragraph, the administration or state institutions did not provide the necessary conditions for meaningful participation, rather the local people and volunteers sought for the alternative ways to influence this HPP process. Furthermore, it is clear that nature's participation was significantly hindered through the legal changes imposed by the state, targeting the Saklıkent National Park. Thus, it could be concluded that the meaningful participation of locals and nature intended in this HPP process (by the legal framework) was quite limited in the HPP case of Saklıkent, but participation became meaningful when locals introduced their own ways to raise their concerns, which eventually led to the withdrawal of the company from the HPP process.

### 8.3 Söğütlüdere HPP

According to Demir (2011), there were three HPP constructions licensed in the area by 2011, all of which were licensed to the same company as the Yuvarlakçay HPP. In January 2010 the company's new proposal to merge these previously licensed projects in a different project proposal was licensed at a site further upstream from the stream. This ultimately refers to this HPP case (Interviewee 31). In that sense, as indicated in the previous section for Saklıkent case, the same point can be reaffirmed: Between 2004 and January 2010, covering the planning, tendering and licensing processes for this HPP, the process mostly reflected an interplay between the state institutions and the companies. The public participation and information processes were not sought in Söğütlüdere or the surrounding villages, as raised by the participants of Group Interviews 5 and 6. [32] For instance, a participant of Group

[32] Group Interview 5, Interviewee 11 and Demir (2011) claim that before the merge of existing licences, original project site was pointed as the middle of limited agricultural lands of Söğütlüdere, which was opposed by the locals. It may be the reason of this merge, but no more information about that process was disclosed by the relevant interviewees. Thus, it is not known if it was a public participation process or not.

Interview 6 claimed that he saw officials from the DSİ 'around ten years ago', when they were conducting measurements. He maintained that he asked who they were, and they told him that they were from DSİ, conducting measurements for a potential HPP, after which they got his phone number to inform him 'about the potential employment opportunities when the HPP would be built'. This marks the only interaction between the state and locals mentioned by this group. When the process is further analysed for this case, it appears that the project was planned, licenced, and negotiated without the locals' involvement (Group Interviews 5 and 6).

Before starting the analysis, it should be distinguished that the construction site and Söğütlüdere are not under the specific protection of specific environmental acts, opposed to the other case areas, and its current environmental impacts can be regarded as minor when the field visit took place in May 2014. Therefore, nature's participation is omitted from this case, while the issue will only be explored in terms of the locals' meaningful participation.

In this case, the first three elements of the meaningful participation are: whether locals were included into the HPP process or not; the degree of representation of their concerns/recommendations in this HPP process; and their ability to influence the HPP process. These can be examined clearly since the state was obviously indifferent in the process. The public participation meeting and its outcome report can be analysed to uncover these elements. Before delving into the analysis, it should be carefully noted here: This public participation/information process was **not** organised due to the EIA process, since the project was granted 'EIA not required' status by the Ministry of Environment and Forestry (the name of the Ministry of Environment and Urbanisation by 2010). In other words, due to the fact that the established electricity generation capacity of this HPP falls under Annex II of the EIA by-laws, the company was required to hand the project proposal to a committee of the Ministry. The Ministry would then evaluate whether the project needed to undertake an EIA process. Eventually, this project was exempted from the EIA process, and hence public participation meetings were not required. However, the company unilaterally organised such meetings in this village because it wanted to receive 'The Gold Standard'[33]certificate for their

[33] The Gold Standard can be defined, by WWF which is one of the sponsors of the certificate, as follows: 'The Gold Standard, supported by WWF, is the most rigorous certification standard globally for carbon offset projects. It ensures that energy efficiency and renewable energy projects actually reduce carbon dioxide (CO2) emissions, and provide benefits to the local population (WWF, 2014)'.

HPP, and public participation meetings were required for this certification (The Gold Standard, 2010).

According to the Gold Standard report of that meeting (2010), the meeting was convened on May 21, 2010, while it was announced in a national newspaper on May 17, 2010. In addition, invitation e-mails were sent to the relevant stakeholders, and an invitation was placed in the window of a coffeehouse in Söğütlüdere in advance. The report (2010: 9) notes that 'only 14 participants filled the attendance form although approximately 40 people attended to the event as can be understood from the pictures'. The content of the meeting included a presentation about the Söğütlüdere HPP, a brief introduction of the concept of sustainable development to the participants, and a Q&A session with a company representative. The report briefly concludes that the HPP would not have major social and environmental impacts to the village, on the contrary, it would contribute to the local livelihoods in the village, especially in the form of job opportunities.

To evaluate the elements of meaningful participation, the report (2010) should be read carefully. By doing this, the intention is not to undervalue the report or the meeting, however, a couple of inconsistencies in the report should be mentioned to investigate its credibility. The first issue is the ambiguous presentation of the number of participants. In Turkey, it is perfectly understandable that people may not wish to give their names or fill a form indicating their attendance in such meetings. This was personally experienced with the local people during interviews, however for a meeting, the determination of the exact number of attendees should not have been an issue. Hence the exact number of people should have been given with the exact number instead of describing it as 'approximately 40' people, even if the number seems correct when checking the pictures as the report recommends. However, this number cannot be presented as a success story as even visiting the village for interviews without any prior notification, the author had a chance to interact with 14 people in total, seven of which were the active participants of the Group Interview 2.

The second issue is that the sample invitation letter, which was sent to invite people to that meeting and was published in the report (2010: 6-7), is titled as 'The Meeting of Informing the Local People on Sekiyaka 3.4 MW HPP [official name of the project]' in its e-mail version. However, when this invitation is read, it is seen that it actually refers to another HPP to be constructed in another district of Muğla by another company. This may be one of the

reasons why the participation of this meeting was not as high as expected, since the readers might have felt confused when they received such an invitation. At this point, the formation of the title as 'the meeting of informing the local people' may imply that the meeting is just for 'informing', rather than ensuring a genuine level of public participation. The last issue to be noted is that though there was information about the HPP project, few technical details were disclosed to the locals. This was highlighted in the attendance form by one of the participants, an architect who might have had useful comments on the actual project plan. This also raised concerns about the project among the locals according to the local newspapers (see *İnternet Muğla*, 2010 and Polat, 2010).

Comments of the participants of Group Interviews 5 and 6 and Interviewee 31 may be helpful in comparing what was said and what was actually done in this case. Overall, the participants of both group interviews claimed that they were not adequately informed about the HPP process. For example, the participants of Group Interview 6, held in Çayan village, did not even refer to this meeting, while those in Group Interview 5 acknowledged the meeting, but criticised its content. According to the participants 'not much information was disclosed during the meeting'. The report clearly indicated that the company representative (Interviewee 31) assured the locals that: they would not divert the irrigation water (this is true, the irrigation water was available by May 2014 as promised); and that they would not expropriate an enormous amount of land (it is true, 90% of the construction site belong to the state). On the contrary, they planned to use underground pipes, allowing land owners to use their lands (they used underground pipes and gave minor environmental destruction, the method of which was praised by Interviewee 7); and they promised they would provide employment opportunities to the locals during and after the construction (The Gold Standard, 2010). In fact, in several places in the report, it is stated that around 70 people from the village might be employed during the construction process, while 10 might be recruited after the completion of the HPP. In the commentaries of the report, it is seen that this promise was attractive for the participants, when they granted their consent to the project (see previous chapters on the socio-economic status of the village).

However, regarding this issue, it was seen during the field visit (and through Group Interview 5) that the company never recruited these numbers of people in the village during the construction, or after its completion. Interviewee 31 admitted that the number of people recruited was 'very limited' and the recruitment was only possible during the construction.

He maintained that they need skilled workers for the operation of the HPP, and the locals do not have qualifications for those positions. Thus, it appears that the public participation meeting and information process in Söğütlüdere HPP was not perfect, which was revealed by examining these deficiencies based on the observation and interviews, although this process was initiated voluntarily by the company that can be an indicator of their good will.

Despite the positive tone of the Gold Standard's report, after the meeting local newspapers published reports indicated that the locals were 'uncomfortable and unhappy' about the potential HPP (*İnternet Muğla*, 2010). Interviewees 9, 11, 13, 22, and 26 and Group Interview 5 also mentioned this response. At that time, the locals were ready to sue the company, and they travelled to the office of Interviewee 13 to hand their petitions. However, their opinion suddenly changed after that visit. The main reason was the costs of the legal process, especially the amount of money that has to be collected to undertake the expert report during the court process (Group Interview 5).

The other reason for the locals' change of stance was, reportedly, the attitude of the *mukhtar* of that time. In contrast to the attitudes mentioned above in the Saklıkent case, it was reported that the *mukhtar* and village council 'secretly' negotiated with the company for this HPP construction in Söğütlüdere (Interviewee 11). Interviewee 31 did not deny these allegations; he said that they tried to fulfil a series of demands raised by the village during the process. In the end, the *mukhtar* and village council agreed with the company on an annual payment to the village, which has to be evidenced by receipts, showing that the payment is used for the village's need. This settlement was also welcomed by the locals (Group Interview 5; see also Chapters 6 and 7). Subsequent to this settlement, the construction began, and the HPP has been operating in the village since January 2014 (Interviewee 31). Hence it appears that the inclusion of locals in the HPP process and representation of locals' concerns and recommendations, were attained through unconventional processes that were voluntarily initiated by the company, not through the existing legal framework of the HPPs.

Here, the issue of meaningful participation is complex. On the one hand, the public participation meeting and information process were not conducted perfectly as seen through the deficiencies of the outcome report and claims of the locals about 'non-information'. On the other hand, however, it would be unfair to say that the locals were not included into the HPP process at all. Although distorted information on the HPP (especially about its

contribution to employment) was provided, and the details of the projects were not shared to the participants of the meeting, where there were engineers and architects (see the participant list indicating the occupation of the participants in the report) who might have useful proposals regarding it, the company at least attempted to inform people about that, although it was not legally required to. However, the recognition of locals and the convention of such meetings do not guarantee meaningful participation since the recommendations and concerns of the people should also be reflected in the final project before it is constructed, as implied by the relevant literature (see the introductory section). Here, there is no data whether this HPP was updated in line with the locals' comments or not**,** but it seems that the meeting's aim was mainly to defend the existing project, which was not fully disclosed to the participants, rather than updating it, based on the interviews and document analysis. However, the demands or concerns of the people were addressed in a different way, where the company and *mukhtar* negotiated and concluded in an agreement, aiming to improve the conditions in the village, which was also welcomed by the locals (Group Interviewee 5 and Interviewee 31). It can be interpreted that the concerns of locals were addressed by the company, and that locals had a chance to influence this HPP process. In other words, the process can be criticised in terms of its operation, but a degree of participation and representation was achieved.

Furthermore, the administration's efforts to include people to such processes as a condition of meaningful participation are non-existent in this case, since the initial processes between 2004 and 2010 excluded the local community from its planning, tendering and licensing processes. Furthermore, their participation was officially hindered with the grant of 'EIA not required' status for the project. Another indication of this non-existence may be the costs of the legal processes, which are considered as 'too costly' (Interviewee 12). There is no mechanisms to financially support people to access to the legal processes, which sometimes becomes the main reason that people step back from their environmental causes (see also Interviewee 26). In the end, the HPP process of Söğütlüdere portrays a complicated picture of meaningful participation, which admittedly reflects a more meaningful participation, at least in theory, compared to the other cases of this analysis, based on what was heard and observed during the field visit.

### 8.4 Kargı-Yanıklar HPP

According to Demir (2011), as also concurred by the interviewees during the field visit, the potential construction site of the HPP in Kargı-Yanıklar basin was used as a picnic and recreational area, which was rented and managed by the *mukhtar*'s office of Karacaören (the name of the site) between 1999 and 2003. The same report indicates that the agreement between the Directorate of Forest Management of Fethiye and *mukhtar*'s office was not extended in 2003; meanwhile, there was a licence issued for a potential HPP construction in the borders of that recreational area in the same year. This license, though it was never used, refers to the first attempt for a potential HPP construction on Kargı Stream. In October 2009, another licence was issued to a company, after which the HPP was included in the zoning plans in May 2010, which sparked the first mobilised opposition by the local people (Demir, 2011). By May 2011, the opposition consisted of petitions and court cases against the HPP construction, and, the company commenced the construction process at Karacaören, where it cut down trees, including *Liquidambar orientalis* and 'around 800 pine trees in the upstream (Interviewee 37)'. This led the locals to organise a series of protests in the area, attracting 'around 500 people (Interviewee 17)' (see Interviewees 9, 11, 13 and locals interviewed in Kargı and Yanıklar villages). This section focusses on this process, and investigates the issue of meaningful participation for local communities and nature in this case.

As a starting point, it can be reaffirmed that planning, tendering and licensing processes of this HPP, there was no involvement of the local communities. As indicated in the introductory paragraph, the first HPP issue came to the agenda in 2003, and was licenced without any prior consultation to the local people (Demir, 2011). Although this project was never realised by the licence-holder, a similar process was witnessed for the next HPP in the basin, which became controversial. Accordingly, when analysed within the national HPP process, local people were not informed about this HPP (licensed in 2009 and commenced in 2011), when the company went through several processes such as application, feasibility studies and licensing. The notification of the HPP, as understood from the relevant documents cited here and Interviewee 37, was realised when the zoning plan was changed by the state, which again does not refer to any consultation/information process. There was also an official letter indicating the locals' concerns about the project right just before the licensing (see the rest of the section for details). It should be noted here that the company was not required to

conduct an EIA process due to the small-scale of the project, meaning that they were not legally bound to ensure the locals' participation, or to conduct public participation meetings under the EIA by-laws (2008, 2013 and 2014). In all the interviews of this locality this non-inclusive nature of the operationalization process of this HPP was criticised (see, for instance, Interviewees 17, 24, and 37).

When the interviews conducted in Kargı and Yanıklar villages are analysed, it is seen that it is not possible to precisely determine how people learnt about the HPP process, since there are differing accounts on this issue. However, one thing becomes quite clear: the locals became aware of the HPP through the 'bush telegraph', not through formal processes aiming to inform them about the HPP process. There was a consensus among these different explanations, which was 'there is no one, asking whether the public wants it or not, so there were not any informants' (Interviewee 21; see also Interviewees 2, 17, 24, 25, 37, and 38). Under these circumstances, it is not possible to discuss locals' inclusion into this HPP process, since they were not aware of the ongoing process until it was physically attempted to be constructed. Furthermore, the representation of people's concerns/recommendations cannot be mentioned within this HPP process, since people were not included into the HPP process.

Here, as in the case of Saklıkent, alternative ways were sought by local people to represent their concerns and make themselves visible at the policy level. Moreover, the locals used alternative methods to influence the ongoing process. As mentioned earlier, as locals were not informed or involved in the HPP process in Kargı-Yanıklar, they mobilised differently. As Interviewee 17 specified, there were two public meetings, documentary-screenings about Turkey's HPP process, picnics at the recreational area to be used as the construction yard, marches, and protests, all of which were organised by local volunteers, not by the company or state. He and the other interviewees, such as Interviewees 2 and 24, underlined that these events were financially supported by a large hotel operating in the downstream area of the stream. The hotel was expecting a sort of deterioration in environmental quality, which is one of the main touristic attractions of the basin and is a main income source for this business and the others by the stream (see Chapter 6). These protests and events were similar to other movements in Turkey. However, for this case, the attitudes of the *mukhtars* in the process and the legal processes can provide depth to the analysis, affecting the meaningful participation. This is especially true regarding the elements of representation of the locals'

concerns/recommendations in the HPP process and their ability to influence the ongoing process.

In terms of the *mukhtars*' attitude, the case represents a complex story. Interviewees 11 and 13 explained that legal struggles started with the initiative of the *mukhtar* of Karacaören Village, which is closest to the construction site, as also seen in the copies of the petitions to apply to the court (copies are filed with the author). However, during the court process, that *mukhtar* stepped back from the process by withdrawing himself from the case. This action was cited in one of the administrative court decisions as one of the reasons for the court to decide against locals as the plaintiff no longer existed (court decision is filed with the author). This move was criticised by Interviewee 2 and especially by Interviewee 37. Interviewee 37, as the *mukhtar* of Kargı Village during this HPP process, claimed that the *mukhtar* of Karacaören was gifted a tractor by the company right before his withdrawal, which was also implied by the other interviewees like Interviewees 2, 11, and 17. This also demonstrates the importance of the *mukhtars* in HPP processes in Turkey in providing access to the companies to operate at the local level, as argued above. This immediate withdrawal resulted in a brief disruption in the legal process, but the other two *mukhtars* intensified in their collaboration, and actively kept the HPP issue on the agendas of the villages; the wife of Interviewee 37 interrupted the interview to underscore this point. Hence it can be reckoned that there was an initial collaboration between three *mukhtars* to run the legal process against this HPP, but the one who initiated it broke the vow between them, shaking the existing struggles. Later, the other two consolidated their efforts to maintain the task, all of which influenced the participation process in this case.

Examining legal processes demonstrates how locals influenced the HPP process. Interviewee 13, as their volunteer lawyer, explained that they initiated two different court cases against the HPP at the local court (copies of the relevant documents are filed with the author). The first case was against the 'EIA not required' decision granted to the company, which was rejected by the local court. The verdict stated that the EIA decision is an administrative process that cannot be carried to the court (Interviewee 13, personal communication, January 2015). [34] This decision was appealed to the higher court, the Council of State, which found the existing plaintiff right and required that this should be reheard in the court. This

[34] It is the case which *mukhtar*, as one of the plaintiffs, withdrew for the case.

requirement was based on the interpretation that the local court's decision is not 'legally fitting' since the EIA process is strongly related to this case due to the existence of *Liquidambar orientalis* in the project basin (the court decision is filed with the author). In line with this decision, this case was reheard in the administrative court and concluded in December 31, 2014, which found the plaintiff right and cancelled the initial decisions granting 'EIA not required' status for this construction. The new ruling referenced the existence of endemic species in the basin, which would be impacted by the construction and operation of the HPPs (the original copy of the court decision is filed with the author). The second court case was against the electricity generation licence of the company. The Council of State ruled in September 27, 2011 that the operation of the company should be stopped until the investigations of this issue were completed (see EMO, 2011; also Interviewee 13). After this decision the company stopped all the works in the area (Interviewee 37). Interviewee 13 specified that such decisions stopping the HPP constructions are generally valid for three years. However he commented that the latest court decision on the EIA process by the Council of State can be referred as 'investigations' mentioned in the Council of State's decision were completed, and it seems unlikely for this HPP to be constructed in the foreseen future.

While legal processes were ongoing, locals also pursued alternative ways to stop the HPP construction and achieve representation of their voices. They initially interacted with branches of the state institutions like the DSİ, the Directorate of Forest Management of Fethiye and the Committee of the Protection of Cultural and Natural Assets (Interviewee 37). For example, in September 2009, before the licensing process concluded in EPDK, the *mukhtar* of Karacaören, who later withdrew from the legal process, received an official reply to his petition (mentioning the concerns of the locals about the potential construction and its potential damages to the nature) from the regional branch of DSİ (the copy is filed with the author). According to this official reply, it seems that the DSİ found valid grounds in the concerns of the locals, and recommended an altitude change in the project, before the licensing process was finalised and construction began. However, this did not seem satisfactory for locals, as understood from the fact that they intensified their opposition after this response and during the company's operation. Whether the company might have implemented the recommendations of the DSİ in their project could not be confirmed by

anyone during the field visit. However, it is important to demonstrate that there was an interaction going on between the DSİ and locals, which was unilaterally initiated by locals.

Another example is the locals' struggle to prove the existence of a sensitive ecosystem in the construction area by officially and unilaterally inquiring it in the Committee of the Protection of Cultural and Natural Assets, right after the company initiated the construction in May 2011 (Polat, 2011). Interviewee 37 explained that their intention was to detect the existence of monumental trees and *Liquidambar orientalis* at the construction sites. As a result, they managed to receive a decision verifying their claims in August 2011 from the abovementioned Committee for the existence of the monumental trees in the construction yard. He maintained, however, that state institutions like the Directorate of Forest Management were reportedly reluctant to implement this decision (also indicated by Interviewee 11). [35] This became evident right after the Committee's verification, when the company continued to cut trees for the construction and the Committee and relevant state institutions did not enforce the decision. Still, these examples are important to demonstrate that the locals were committed to representing their concerns, and tried to influence the process in this case while the court cases were continuing.

In addition to these anthropocentric evaluations of meaningful participation, nature's participation can also be investigated in this case. In this case, the Law on the Environment (1983) and Annex V of the EIA by-law, listing the ecologically sensitive areas, provided a legal basis to ensure the proxy-participation of the nature in the HPP process. It provided a degree of protection for the endemic species, *Liquidambar orientalis*.[36] In addition, the Committee of the Protection of Cultural and Natural Assets provides protection status to particular ecosystems, which were the monumental trees in this case. Through these laws and committees, nature is supposed to be proxy-represented in the policy process. However, when the HPP process of this basin is revisited, it is seen that the official HPP process was shaped by interplay between the company and the state, and did not pay attention to ensure this

[35] The important thing to note here is that the Committee of the Protection of Cultural and Natural Assets was abolished in Turkey, one week after that decision due to an institutional restricting at the national level. Since August 2011, the Committee has been divided into two as the Directorate of the Protection of Natural Assets and the Directorate of the Protection of Cultural Assets. This coincidental restructuring may be regarded as the reason of the reluctance of the Committee to impose its decision (Interviewee 11).

[36] As introduced before, *Liquidambar orientalis* is listed among the species to be protected by the Bern Convention.

proxy-representation. Instead, the state provided the necessary permissions to the company to build the HPP, mainly due to the amendments introduced to the Law on Renewables (2005), as introduced in the case of Saklıkent, enabling companies to construct HPPs on sensitive ecosystems. In other words, within the official HPP process, the representation of nature was undermined. However, when the relevant court decisions on this HPP are revisited, it is observed that the company and the state were reminded of the abovementioned legal framework protecting this area, especially the Law on Environment (1983). This contributed to stopping the construction and asking for a proper EIA process, since the area has endemic species, although the company was once exempted from the EIA process. In terms of the nature's meaningful participation, it can be claimed that the original process undermined this, while it was later reinstated by the court decisions, mainly due to the existence of *Liquidambar orientalis* in the basin (see the expert report on file with the author).

These processes explained here for locals' and nature's participation can lead us to evaluate the other component of the meaningful participation: the state's efforts to ensure the public participation. Here, once again, it is possible to directly conclude that there was neither effort nor obstacle of the state to enhance public participation. The EIA process was not followed in this case due to the small-scale of the project. This officially closed the doors for the public participation, since it is the only way to ensure public participation within the legal framework of HPPs. Depending on the *mukhtar* of Karacaören Village's correspondence with DSİ, it can also be concluded that the state actually seemed to care about the locals' recommendations, which, unfortunately, could not be confirmed by any interviewees in this case area. The state institutions were not keen on fulfilment of the relevant institutions' decisions regarding the existence of an important ecosystem in the construction site, which was enforced by the higher court's decisions in the following process. Based on this analysis, it can be concluded that the state institutions did not make an extra effort to enhance the public participation. They also did not prevent people to demonstrate their views, as concurred by the interviewees of this area. However, as seen in this section, locals tried to raise their concerns and recommendations during the process by their own means without any effort by the state and company, implying the reluctance of these actors for meaningful participation of the locals. This also underlines locals' wish to have a voice in the HPP process. Thus, for the entire HPP process in Kargı-Yanıklar, the meaningful participation of locals cannot be mentioned since the official process did not provide it. Later it was attained

by locals by their own means. In addition, this HPP case shows a clear case of proxy-participation of the nature to the HPP process, where all relevant court decisions against the HPP construction were centred on the existence of the endemic species, *Liquidambar orientalis*, which was initially neglected.

### 8.5 Yuvarlakçay HPP

According to EPDK's licence investigation database (2015), the Yuvarlakçay HPP was licensed in July 2007. Interviewees of this site and their own publication of the Yuvarlakçay resistance (Çobanoğlu et al, 2014) narrated that it was in December 2009 that the company initiated their construction. Reportedly, most of the locals got to know about the HPP, which immediately triggered a highly publicised public opposition, which lasted almost a year. This section investigates the procedural justice issues embedded in this process, based on the notion of meaningful participation.

There was no proper information process in the planning, tendering and licensing processes of the HPP. This is because the capacity of the HPP, 3.4 MW, was below the limits set by the EIA by-law on rule by December 2009 (Interviewee 12; see also Çobanoğlu et al, 2014). This means that the company was not required to conduct public participation meetings before they began operations due to the fact that it was granted 'EIA not required' status by January, 21, 2008, as seen in the company's information sheet introducing the project (the source is filed with the author). However, few interviewees such as Interviewees 12, 16, 19, and 39 stated that there was a so-called information process undertaken by the company before the trees were cut down in Yuvarlakçay basin. Interviewee 12 specified that 'the first court case regarding HPP was initiated by the *mukhtar* of Pınarköy, but, for some reason, it was mixed up with an affair, it did not proceed…The *mukhtar* was aware of the HPP, but he did not inform the peasants'. This was criticised particularly by Interviewee 16, where she claimed that 'it was the *mukhtar* who gave the first signature approving the HPP construction…It was after his signature when the other things were started', hinting that their *mukhtar* knew about the process, but he did not inform the others. She, on the other hand, asserted that a company representative, while visiting their demonstrations, angrily blamed peasants for not attending the public information meeting conducted in Köyceğiz. Further, she questioned: 'Is this water sourcing from Köyceğiz?...Why did not you visit Pınarköy or

Topgözü [the name given to the source of water by the locals]?'. Interviewee 39, as the head of Municipality of Köyceğiz, the main town associated with the field area, complained that 'the owners of the project claimed that they did such consultation meetings, but I have no information about it. If I say they did, then why do not I know about it?'. He maintained that 'the people who should be the part of the process and whose opinions should be received' were not consulted; by this he was mainly referring to himself as the head of municipality, who was not consulted by the company and relevant state institutions prior to the construction. About this issue, Interviewee 19, as a person who was one of the initiators of the camping process and stayed in the camp '24/7' for 'four-five months' also shares the rumour he heard in the camp:

> 'They did a really worthless meeting, almost no one knew about it. There, they made a couple of promises to the municipality [referring to Beyobası, not the one headed by Interviewee 39][37], you know, like 'we will build a wedding hall there'…Besides they do not tell the truth, for example, they had said…when the dam is completed, 100 people from the village will work there. You know, HPPs are run by around three people subsequent to its completion…'

From these examples, it can be seen that some sort of an information process was attempted to be conducted by the company, but which was apparently not publicised properly around the site as local administrators themselves were even excluded from an information process (see Interviewee 39).

Based on this information outlining the official information process on the Yuvarlakçay HPP, it is beneficial to examine how locals were informed about the process. For this reason, when the locals were asked if they had prior information about this project or not, they provided the same answer (no); but when they were asked how they learnt about it, their responses differed. The one thing they had in common, though, was that the company and the state did not inform them. A group of people interviewed like Interviewees 4, 8, 10 and 19 referred to a meeting organised by the locals to discuss the HPP issue as the place they were informed about this process. These interviewees all confirmed that the attendance to this meeting was limited to 40-50 people (see also Çobanoğlu et al, 2014). Interviewee 16 highlighted, the actual awareness of the locals of Pınarköy of the HPP issue was realised when the company cut the trees to open up the construction yard, despite the relevant state institutions' promises

[37] It was claimed by Interviewee 16 and Interviewee 18 that the Municipality of Beyobası initially sided with the company, however, when the process evolved smoothly, they also supported their cause.

ensuring locals about the fact that trees would not be cut (see also Interviewee 4 and Interviewee 8, and Çobanoğlu et al, 2014). It is inferred that local people became aware of the HPP construction in Yuvarlakçay by their own means rather than a process administered by the state and/or the company.

When these experiences are evaluated, it can be repeated that a proper information process was not conducted in this case area. Interviewee 12 clarifies that

> 'the biggest unfairness [of the HPP process of Yuvarlakçay] was mainly the fact that the locals were not informed about the process, you know, the company went for it, and they wished to construct the project, and they did not tell it to anyone in that village, so no one knows it in that village…Then, they did not put even the draft versions of the project [for discussion]'.

Even Interviewee 31, the company representative, could not deny this claim, once he blamed the company's engineer who was initially in charge of this case for 'being distant from the locals'. While he said that he had generally respected to locals in such processes, he hinted that the company was not engaged to the local people at the beginning of the process. From the data obtained during the field visit, it is clearly seen that the local people (villagers), the locals of the basin (surrounding towns and villages), and even the local administrators were not included into Yuvarlakçay's HPP process. Their opinions and interests were ignored based on the legal framework, which exempted the company from going through the EIA process, making it impossible to talk about an official process in which concerns/recommendations of them were represented.

There were alternative ways for locals to ensure their representation in the process, enabling them to influence this HPP process. In terms of originality of these ways and publicity of them, the Yuvarlakçay HPP represents a landmark HPP case in Turkey, which was among the first publicised HPP resistances/oppositions of Turkey. It is not only how the locals organised the protests and initiated legal cases, but it is also how they drew the attention of celebrities, national media, prominent politicians, columnists, and ordinary citizens out of the region whose pictures and newspaper articles can be found in Çobanoğlu et al (2014). According to that publication, the initial demonstrations, held in early December 2009 right after restaurants were notified about their expropriation, were small-scale with around 40-50 people were marching and protesting the construction attempt before it started. Interviewee 10 underlined that even after the meeting convened on December 12, 2009, protests were

small-scale. Meanwhile, Interviewee 10 shows that they initiated legal struggles by preparing inquiries about the status of the monumental plane trees located in the construction yard, which were under the protection of the Committee of Protection of Cultural and Natural Assets (which was renamed and restructured in August 2011, see footnote 35), as specified by Interviewee 12. In addition, as indicated by all the interviewees of this case, the actual large-scale protests began immediately after the trees, including around 900 pines and eight monumental planes, were cut down by the company for opening space for the construction on December 15, 2009, which alerted the locals of Pınarköy. Immediately after this, as Interviewee 19 claimed, they spontaneously organised a meeting in the cleansed area and they agreed not to hand the timbers of the monumental planes to the state institutions or the company. By doing so, they considered that these timbers might have been the 'evidence of the crime' since the area and specifically those trees should have been protected by the Committee and relevant environmental acts, including the one about Special Environmental Protection Areas as the region locates within the borders of this.

Interviewees 8, 16, 18, and 19 all confirmed that right after this incident, the timbers were attempted to be collected by the state institutions, but especially women prevented this by 'sitting on the timbers or road to prevent them to collect the timbers'. This led locals to guard the timbers for a few weeks to prevent their collection, while the participants from Dalyan raised the issue in the surrounding towns and districts (Çobanoğlu et al, 2014). In December 29, 2009, when Interviewee 19 suggested forming a camp around the cleansed area to protect the timbers, subsequent to their witness of the state's attempts to collect the timbers. Then, the camp was established, and it lasted for eleven months without interruption, in which 'some days a thousand people were living' (Interviewee 19).

Meanwhile, when such protests intensified, a series of legal cases were initiated by Interviewee 12. She summarises them as follows:

> 'It was December 2009, when we learned that this project would be constructed here. We learnt that there was a decision [approval] of the Governorship, all permits were issued, you know, forest and water agreements [were signed], the forestry were allocated…so we had to sue all these permits. We sued for the cancellation of water use rights agreement; we demanded the cancellation of the allocation of forestry [for the construction]; we demanded the cancellation of the 'EIA not required' decision; we demanded the cancellations of the zoning plans enabling this HPP construction…Only for the zoning plan, there were four different cases since the area is the part of the Special Environmental Protection

> Areas…Furthermore, monumental trees, …the number of trees to be cut, there was a decision reducing the number of trees to be protected…So we had 16 cases in total, including the ones demanding the cancellation of expropriations...[and] production licence.'

She also highlighted that by May 2014, they have won all these cases, except the one about the cancellation of the licence, which is still ongoing.

The other component of meaningful participation, the administration's efforts to ensure public participation, provides different dimensions and further elaborates the public participation and their influence on the HPP process. As the interviewees in this case specified, there were a series of pressures, inconsistencies, and incidents faced during the protests, all of which were imposed by the state institutions. It is noteworthy to indicate these to determine the state's perception of the public participation or demonstrations, organised within the democratic norms and constitutional framework applied for all Turkish citizens.

The biggest issue faced by locals of Pınarköy during demonstrations was the state institutions like the Directorate General of Forest Management pressured them due to village's administrative status, which is classified as a forest village, as constantly referred to in the previous chapters (and mentioned by all interviewees of the Yuvarlakçay HPP). It is important to define what this means in the Turkish context, and how it can affect the inhabitants' lives. 'In Turkey, forest villages are villages containing a forest within their administrative borders. Inhabitants of these villages typically have a living standard far below national average; their agricultural fields are small, and unemployment rates are high (Atmış et al, 2009: 103)'. According to Atmış et al (2009), such villages are supposed to have a forest cooperative to employ inhabitants in forest-related jobs, where the inhabitants utilise the forest under the control of the cooperative. Interviewee 12 stated that the rules on locals utilising the forest are quite restrictive, and their violation had led to the imprisonment of the several people living in Pınarköy in the past.

Another issue regarding this, raised by her and Interviewee 8, is the title deed status of these villages. Accordingly, it is very common to hear stories in Pınarköy that most of the dwellings and fields are not officially owned by locals since they remain within the borders of the forest, but somehow, customarily, their existence on these lands and houses has been recognised and tolerated by the state, meaning that they own these lands and houses without a title deed (see Interviewee 4, when defining the village's lands as 'inherited by their ancestors'

although they have had the title deed problem for years). However, this situation came to the village's agenda during the HPP process. First of all, as stated in the company's information sheet (filed with the author) and confirmed by Interviewees 12 and 31, most of the lands (89%) expropriated in the HPP process were within the forestry area, while the rest was under private ownership. This means that the company mostly handled with the expropriation process with the state, while the people having fields or houses within the construction area were not able to claim any reimbursement, due to the non-existence of the title deed. Secondly, all the interviewees of this case claimed that the state and company through the Directorate General of Forest Management, threatened them to oust from their lands/fields during the demonstrations and camping process.

Interviewee 4 indicated that he and fellow leading protestors were once called to the Köyceğiz Forestry Cooperative, and 'warned' about their involvement in the protests at the beginning of the demonstrations. Interviewees 10 and 20 confirmed that right after they initiated the HPP opposition, inspections to their restaurants and their work permits were tightened, as a result of which they were financially fined. Interviewees 16 and 18 contended that during the demonstrations, state institutions investigated the 'illegal' buildings in the village, as a result of which people were financially fined for 'harming forestry area' for which 'there are still some people paying instalments of those fines'. Interviewee 8 and Çobanoğlu et al (2014) claimed that one person, named 'Cihan Ünal', denounced the illegal lands and houses in the village during the demonstrations, as a result of which those investigations took place and people were fined. The interesting fact about this denouncement is that Cihan Ünal is the name of a prominent Turkish stage actor, and Interviewee 8 told that they could not find this person, which, according to him, proved that it was a staged denouncement. These examples showed how the state institutions, especially the forestry institutions, used this disadvantage (Pınarköy's administrative status as a forest village) during the opposition process. Interviewee 8 summarised the issue and summarised the involvement of these institutions to the HPP process as follows:

> 'The Director General of Forestry and some people working in Köyceğiz Forestry Management, who were later sent from there, directly threatened the public…[by saying] "look, your houses are in the forest, they are illegal" etc. Thus, they actually did it, they punished people. For instance, they have been living in these houses for 15 or 20 years, you, as the state, did not solve their problem, which you have to. Because, you put them there, you let them to live inside the forest, even you urged it…You gave them job, forestry job. Now, suddenly, because of the fact that they oppose to the HPP, you

> intimidated them and you fined [financially] their houses. The only thing the state did was this, unfortunately.'

Interviewee 39 confirmed this approach, and he maintained that the relevant institutions also used these arguments to pressure on the locals of Pınarköy to get their votes. This was witnessed during the local elections of March 2014, when the ruling party was campaigning (Interviewee 39). In short, during the demonstrations, the state institutions actually attempted to exploit the legal status of Pınarköy to stop the protest and dissuade the protestors.

The other issue, which can be analysed within the state's efforts to ensure public participation, concerned problems associated with the legal process and its operation, as mainly discussed by Interviewee 12. Although local interviewees, like Interviewees 10 and 16 were thankful to the legal system in the end of the legal processes, Interviewee 12, as their lawyer, complained about the procedures, and how it might have been discouraging for the people. She, for example, criticised that 'they pay too much fees to initiate the case…especially for the explorations [conducted by the experts to use in the legal process]…, which are not afforded either by the state or by the company' (see also Interviewees 13 and 26). She also contended that 'the process is slow…It was December, when we started to keep guard, then it was around May 30, when the exploration took place, and it was around July, when the court stopped it'. She also highlighted the difficulties they experienced in the court process as follows:

> 'We spent most of the time just to reach to the documents…We had an inspection of evidences here. [The Ministry of] Environment and Urbanisation or DSİ did not give the documents easily at all. In fact, we never received what we wanted…What we did was that the company published a brochure, we benefited from it. Since there was a decision of 'EIA not required', there was no project introduction file, so we could not benefit from it. It was like rule of thumb…For instance, we wanted information from DSİ like the copy of water use right agreement. We could not get it from DSİ. We went to Muğla, Muğla sent us to Aydın [the other city, neighbouring to Muğla]. We went to Aydın, then they told us that they would post it to us. It did not come; meanwhile we applied to [the Directorate General of] Forest Management [for some other information]. From some documents they handed us, there was water use right agreement, so we learnt about it…[In the process], we worked like detectives.'

This was not the only incident experienced during the protests. The state's stance against the protestors during the camping and demonstrations at the individual level can be highlighted, which can be incorporated into the legal part of the narrative. For example, in the beginning

of the process, on February 6, 2010, the officials from the General Directorate of Forest Management of Köyceğiz minuted 13 protestors including Interviewees 4, 8, 10, 16 and 19 for 'preventing the state officials to undertake their duties' which was to collect the timbers from the camp area (see the copy of the minutes in Çobanoğlu et al, 2014). Interviewee 12 added that 'following this incident, 1121 more people denounced themselves' to the prosecutor by claiming that it was not only these 13 people, but all of them had prevented state officials from operating. As a result of this action 'the prosecutor did not take the legal action' due to the bureaucratic overload. Interviewee 10 indicated that they were accused several times of provoking the locals during the process, for which they were investigated and prosecuted. Interviewee 12 confirmed this point by highlighting that in addition to the 16 legal cases she was executing during the process, she was also dealing with such individual minutes or investigations during the demonstrations, as a result of which all of the protestors were found 'not guilty' and 'cleared'. Interviewee 16, in praising the lawyer's works, said that '[due to abovementioned reasons] we were at the courts…and we were acquitted. We do not have any element of guilt. Nothing! We did not do any extravagance'. In addition to such cases, Interviewee 26 shared an interesting anecdote. He claimed that a group of medical high school students came with their teachers to the protests and hung their stethoscopes on the trees to underline that those trees are still living. This was opposed to the company's claim that these trees are dead and they are not monumental (according to Interviewees 6 and 31). He maintained that these students and their teachers were investigated during this process for 'conducting an unauthorised health checks' especially when they checked the tensions of 'a couple of old people who asked them to do' in the camp area. These examples imply that the camping and protests were not comfortable for the protestors, since they were faced with a series of investigations and minutes held by the state institutions. The reason for the state's action appears to discourage the locals, based on interview data.

In addition to these individual examples, Interviewees 16, 18 and 19 indicated that they, as the group in the camp, felt insecure while they were at the camp, which was always 'under the threat of raid of gendarme'. They maintained that they were not allowed to communicate with megaphones, but they rather had to use large drums to communicate with the surrounding villages in the case of any potential company or state visit to collect the timbers. Interviewee 19 mentioned the similar cases, while he also indicated that 'once there was a

military unit of 200 coming from Muğla…to sweep us away [from the camp]'. [38] Such examples may also hint that these protests were not welcomed by the state.

At this point, although not directly related to the state's efforts to enhance public participation, the company's position during the legal process should be examined to show why the companies in Turkey's HPP process are reluctant to step back from the HPP constructions, and how these positions influence the meaningful public participation. For the former point, Interviewee 31 complained about the legal obligations they have due to the licence. He explained that when the owner of their company declared their withdrawal from the Yuvarlakçay HPP after the first court case won by the locals, since he thought that it is 'pointless' to oppose to 'the huge negative perception against them', but reportedly, 'EDPK was not happy about his declaration'. He maintained that 'there are several sanctions if you do not fulfil the requirements of the licence', implying that it is not that easy to declare a potential withdrawal. He contended that they were no longer subjected to the requirements of the licence once there was a court decision stopping the construction. Accordingly, this shows that withdrawing from a HPP constructions is not an easy decision, since companies may be burdened financially as a result of the process.

The analysis of nature's meaningful participation may bring more depth to this case. Here, nature's participation into the HPP process becomes clear, especially when trees were cut down and it suddenly mobilised the locals against the construction. Within the context of nature's participation, the disappearance of trees may be perceived as a way of nature communicating with the people. In other words, the trees were actively proxy-represented by the locals during the camping, where they tried to prevent further cleansing. In the legal framework, the Yuvarlakçay basin was proxy-represented and protected through the environmental acts especially through: the Law on the Environment (1983), the Law on Forestry, the decisions of the Committee of the Protection of Cultural and Natural Assets, (recognising the monumental trees and providing them with protection), and the legal framework of Special Environmental Protection Areas. As a result, such legal frameworks intend to provide a mechanism to protect an area and restrict human actions there, while the EIA by-laws also indicate that areas protected under these legislations should be carefully considered during the policy processes including the HPP-related ones. This reasoning was

[38] He requests me not to go in detail about it and tells the rest of the story 'off-the-record'.

cited in the court verdict stopping the construction (original copy is filed with the author). This may provide an understanding that these legislations enable nature to be included into the HPP process.

When the HPP case of Yuvarlakçay is revisited, these frameworks were neglected for the sake of the realisation of the HPP, where all relevant state institutions provided necessary permissions to the company to construct the HPP. Accordingly, the state did not recognise nature's existing rights in the Yuvarlakçay HPP process, on the contrary, its position actually paved way to environmental damage (in the form of cutting of trees), which was one of the most important motivations for the locals when they mobilised (see Interviewees 4, 16, 18, and 20 from Pınarköy, see also Interviewees 8, 15 and 19 from the surrounding towns). Hence nature's meaningful participation in the Yuvarlakçay HPP process as operated by the state and the company was quite limited, while the locals and activists attempted to represent it by proxy.

In conclusion, the Yuvarlakçay HPP case, as one of the earliest and most publicised HPP opposition cases of Turkey, offers unique points in terms of meaningful participation as well. Here, as seen in the other cases, the locals' inclusion and representation of their concerns and recommendations in the HPP process are as controversial as in the previous case studies of Saklıkent and Kargı-Yanıklar. In other words, in the beginning of the process, the attainment of public participation was not particularly prioritised by the company and the state, leading to the feeling among the locals that they were being ignored (see the previous chapter for details). As indicated above, this ignorance was among one of the main reasons that these people mobilised their quest and organised alternative ways to raise their voices. When revisiting the outcome, it is clear that the locals were successful in defending their positions, but it should be distinguished that these protests and legal struggles did not mean that they meaningfully participated in the process (although they influenced it). These actions were taken due to the improper implementation of the participatory mechanisms in the process, and they were parts of the locals' own will to achieve justice against the procedures excluding them as also seen in the previous case studies of Saklıkent and Kargı-Yanıklar. Here, the important parts were the state's position and the problems seen in the legal process, which clearly demonstrates that the state institutions did not encourage the locals' participation (their protests and legal struggles). In fact they actually threatened and made the process difficult for them, while also neglecting the existing environmental acts protecting the area.

Based on this analysis, it can be claimed that meaningful participation was not encouraged and welcomed in the Yuvarlakçay HPP case by the state and the company. However, the locals were successful in endorsing their existence and achieving meaningful participation by their own means, in spite of a series of problems they experienced in the process. As Interviewee 12 says '[The final decision] was the decision of the locals of Yuvarlakçay. They said it would not be constructed, and the court confirmed that'.

## 8.6 Conclusions

Throughout the chapter, the relationship between procedural justice and environmental justice is explored by specifically endorsing the notion of meaningful participation, which is considered as the backbone of the procedural analysis of the environmental issues by environmental justice scholars (see Holifield, 2012). This chapter was centred on this notion and how it was reflected in the relevant legal framework of the HPPs and the national HPP process. Each case study was analysed by using meaningful participation as a criterion of analysis. In line with the existing literature (see Solitare, 2005), there are four elements of meaningful participation, which are: the inclusion of local communities into the decision-making process; the representation of their concerns/recommendations in the policy process; their ability to influence the policy process; and, the state's role in ensuring public participation. As indicated in this chapter, these elements of meaningful participation also exist in Turkish legislation and the relevant legal framework of HPPs, which justifies the procedural analysis of the HPPs within this context.

By taking this approach, numerous procedural (in)justices were uncovered in the case study areas, while also the concept of meaningful participation was empirically informed. For the first element of meaningful participation, the inclusion of local communities into the HPP process, it was found that it is not easy to make a direct claim. For example, in the Saklıkent HPP, by only examining the EIA process, it is possible to conclude that the local community was included into the process, since there were two EIA-bound meetings conducted in the basin. However, the content and timing of those meetings demonstrated that this inclusion remained an ostensible one, since they were conducted right before the initiation of the construction process, after the completion of planning, tendering and licensing processes. On the other hand, in the Kargı-Yanıklar and Yuvarlakçay cases, even an ostensible inclusion of

locals into the HPP process cannot be mentioned, since there was nothing particularly done to include locals to the process in the former case, while locals only became the part of the story in the latter when the company cut down trees at the construction site. Among those cases, only the Söğütlüdere HPP case offers a different story. Here the company voluntarily followed a public participation process to be qualified for a certificate enabling them to trade the electricity to be produced from the HPP. Although this process was flawed and operated improperly, the unilateral initiative of the company actually shows that locals were considered as actors in the process. Also, for this case, the company reportedly changed the initial projects and merged them under a new licence by locating the proposed HPP further from the village, in line with the initial consultations undertaken, even before those unilateral public participation meetings. These issues can be examples of locals' consideration as actors in this HPP process, compared to the other cases. However, it is essential to highlight that all of these HPP cases were planned, tendered and licensed before an explicit consideration of locals. This can be proved when cases are revisited, where it is clearly seen that there are years between the date of license and the date of initiation of construction processes.

Along with this analysis, the second element of meaningful participation, the representation of locals' concerns/recommendations in the HPP process, was also analysed. Since the EIA by-laws require companies' to reflect locals' recommendations and address their concerns in the final project file, it is correct to analyse this element of meaningful participation in this research. With the slight exception of the Söğütlüdere case, it can be concluded that locals' recommendations/concerns were not addressed in the any of those cases within the official process and legal framework. For instance, the locals of Saklıkent basin highlighted that their thoughts regarding this HPP were 'opposed and expelled' by the company and state during the EIA-bound meetings in the basin (see Interviewee 3). In the Kargı-Yanıklar and Yuvarlakçay cases, locals tried numerous ways to make their voices heard in the HPP processes, which were not integrated into the final projects. The respective intensification of the opposition and legal struggles in these cases, which were perceived as a last resort by the locals to achieve representation of their thoughts, reflect above conclusion. In the Söğütlüdere case, the conclusion about representation is slightly different because of the existence of an agreement between the company and the village, requiring the company to annually pay the village (the payment is supposed to be used for village's needs and compensate potential harms that the HPP might cause). Although there are controversies

about this negotiation process, in which, for example, a *mukhtar* was blamed for secretly proceeding those negotiations (Group Interview 5), it would be misleading to disregard the abovementioned agreement and conclude that locals' concerns were not represented in this process. However, it should be carefully noted that this representation did not occur within the official process determined by the relevant legal framework for HPP development, which originally exempted the company from following a public participation process through Annex II of the EIA by-law. In summary, in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases, the representation of locals was non-existent within the official HPP process, while the Söğütlüdere case included a degree of it, which was realised outside of the official process.

This carries the discussion to the analysis of the third element of meaningful participation, the ability of the locals to influence the HPP process, which was a controversial one in the case areas. It can be straightforwardly claimed that locals had ability to influence all of these HPP processes, as in each case they actually achieved this. However, it is vital to note that their influence was realised not through the official HPP process, but rather via alternative methods promoted unilaterally by the locals. For the Saklıkent HPP, the public's influence was ensured through their own awareness-raising activities and demonstrations, which were reinforced by legal struggles initiated by the locals. In the end, the company had to step back from the process due to the public opposition, displaying that locals had the power to influence the process, but with their own means, not through a chance given to them by the HPP process itself. In the Kargı-Yanıklar case, the process was similar; locals used their own means to influence the process via demonstrations and awareness-raising activities, and particularly through legal cases. The main difference is that the HPP construction was stopped due to a court decision, not due to public opposition. Still, it indicates how locals impacted the process by their own means, supported by court decisions. The Yuvarlakçay case, on the other hand, can be considered as a mixture of the Saklıkent and Kargı-Yanıklar cases, since it involved a high degree of public opposition and numerous legal cases, as a result of which company withdrew itself from the process. The courts also ruled in favour of the locals in all the cases concluded by August 2015. As explained above, this was again achieved by the locals' own means, not within the official HPP process. The Söğütlüdere case represents a different perspective in this analysis. As explained above, the locals were able to influence that process, but it would be wrong to talk about a high degree of

mobilisation or consensus, since there were groups initially against the construction. Here it seems that the village got what it wanted through agreeing with the company, but the process was still criticised for its secrecy and closeness by the opponents (see Group Interview 5).

The fourth element of meaningful participation, the state's role in ensuring public participation, is controversial. It can be claimed that for the Saklıkent and Söğütlüdere cases, the state was indifferent, meaning that it neither encouraged nor discouraged public participation, neglecting that the state institutions initiated an alternative meeting to convince locals about the HPP construction in Saklıkent (see Interviewee 3). In addition, in the Saklıkent case, and partly in the Kargı-Yanıklar case, the state did not prevent people from using their own means to influence the HPP process by not taking a harsh stance against the opponents. However, for the Kargı-Yanıklar case, it should be highlighted that state institutions did not initially implement the initial court decisions stopping the constructions (Interviewee 13), and they did not enforce the decisions of the relevant state institutions, indicating the existence of monumental trees in the constructions site, which were supposed to be conserved. However, it was in the Yuvarlakçay case where there was a strong polarisation between locals and the state. As explained before, in this case, the state actually deterred locals while they were protesting, mainly by using the administrative gap of the village, which is classified as a forest village, against the opponents. In other words, the state used its power to discourage protestors by officially investigating and fining them. Under these circumstances, it would be wrong to think about the state's efforts to ensure public participation, as it rather used its authority to stop it.

This chapter did not only look for the meaningful participation of locals in the case areas. These four elements of meaningful participation were also extended towards nature. Very generally, when the legal framework of HPPs is viewed with the selected environmental acts introduced implied throughout this research, it is seen that nature's proxy-participation in environmental governance is actually secured through them. In other words, in the EIA by-law, it is clearly underlined that relevant environmental acts should be visited and considered carefully in the process of project development, prior to construction. By doing this, the state ostensibly guarantees the nature's participation in the HPP process.

When case studies are revisited, the Söğütlüdere case can be excluded from this analysis, since it does not fall under the category of 'sensitive areas' described by the EIA by-law.

However, other case study areas represent unique points regarding that. In general, nature was not included into the HPP process; its needs and interests were not represented; it was not able to influence the HPP processes prior to the initiation of the construction processes; and the state did not act much to ensure its proxy-participation in the HPP processes in cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay. The facts that the Saklıkent HPP was planned within the former borders of a national park; Kargı-Yanıklar HPP's construction yard was located on the reproduction corridor of an endangered and endemic species; and the Yuvarlakçay HPP was located within the borders of Special Environmental Protection Area, together reinforce this claim.

However, there were also features of nature which were actively used in the opposition processes, as a result of which these HPPs were not constructed. For example, Saklıkent's nature, enabling locals to develop touristic businesses, was one of the main arguments which mobilised locals against the construction. In addition, due to the same reason, lawyers and protestors in the Kargı-Yanıklar case used the argument of the existence of endangered and endemic species in the legal process, which was cited as the main reason by courts to stop that construction. In the Yuvarlakçay case, it was the felling of trees that triggered massive local opposition, while courts also referred to the region's existence within the borders of a Special Environmental Protection Area when they outlawed the construction. Thus, as seen in these cases, the participation of nature was ensured through nature's communication with locals and relevant institutions, and eventually nature obtained its right of protection by its own means, confirmed by the court decisions.

Although Turkey's HPP process and legal framework includes the elements of meaningful participation of local communities and nature, these are not properly implemented, which caused injustices at the local level when the companies attempted to construct these HPPs. The exceptions provided for the HPPs, especially in the implementation of EIA by-laws and amendments undermining the sensitive nature reserves like national parks, endangered species and Special Environment Protection Areas, can be tangible examples of the poor implementation of the existing legal framework. This leads to the formation of socio-environmental injustices in the HPP processes, as demonstrated through the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases.

# CHAPTER 9 DISCUSSION: SCALING UP ENVIRONMENTAL JUSTICE CLAIMS FROM LOCAL TO NATIONAL AND MODIFYING ENVIRONMENTAL JUSTICE FRAMEWORK

## 9.1 Introduction

This research has so far articulated Turkey's HPP development phase within the context of environmental justice. In this regard, Walker's (2012) framework of making environmental justice claims has been used to frame the study. While Chapter 3 elaborated on this conceptual framework and 'ideal' environmental justice, Chapter 5 focussed on the broad history of Turkey's water management in exploration of the roots of current socio-environmental inequalities faced in its HPP process. Chapters 6, 7 and 8 thoroughly substantiated those inequalities based on the HPP cases of Western Mediterranean Province of Turkey. HPP processes have been associated with numerous injustices, which were revealed through analyses of local cases in terms of distributive, recognitional and participative (procedural) environmental justice. Yet, this analysis hitherto remains too local. Hence this chapter aims to 'scale up' by reinforcing connections between the chapters.

To this end, this chapter situates local HPP cases into the national HPP process of Turkey and discusses environmental justice dimensions of HPPs at the national level. Field results presented in Chapters 6, 7 and 8 are integrated into the history of Turkey's water management. By doing so, legacies of modernisation are explored in Turkey's HPP process, which enables conclusions to be drawn on a larger scale. This eventually reinforces the relation between 'justice' (see Chapter 3), 'process' (see Chapter 5) and 'evidence' (see Chapter 6, 7 and 8). Accordingly, the following sections discuss field results of distributive, recognitional and participative (procedural) environmental justice within the context of Turkey's modernisation process. By doing so, this chapter suggests that environmental justice analyses can employ 'modernisation' as an explanatory framework of the causes of socio-environmental inequalities (see Chapter 3). It also puts forward that the environmental justice concept may be enriched with the endorsement of a new pattern of analysis along with the field results.

## 9.2 Discussion I: Interpreting Recognitional Environmental Justice in the Turkish context and its HPP Process

In Chapter 7, HPP cases of Western Mediterranean Province were analysed through the patterns of place stigmatisation, (non)recognition of locality and (non)recognition of the nature. Senses of a place, whether they have positive or negative connotations to the locals, were essential for locals in framing their justice claims. This was seen especially in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases, where they perceived a 'HPP' as a technology altering positive senses of a place. On the other hand, the Söğütlüdere case showed that existing negativities of the place could ease the instalment of a HPP, as it did there. In addition, field studies discovered that local communities were not recognised or considered as actors in those HPP processes, which was confirmed when local interviewees unanimously asserted that they were neither informed nor consulted in those processes. Moreover, local professionals, including local administrators, local DSİ engineers, NGO representatives and local entrepreneurs (among others), criticised that their expertise and knowledge of the region were completely ignored in the relevant HPP processes. Above all, these cases, especially the ones in Saklıkent, Kargı-Yanıklar and Yuvarlakçay, revealed that sensitive ecosystems were not respected in the HPP processes. It was attested that construction sites have remained inside or very close to a national park (Saklıkent), to a reproduction corridor of an endemic species (*Liquidambar orientalis* in Kargı-Yanıklar) and to the Special Environment Protection Area (Saklıkent, Kargı-Yanıklar and Yuvarlakçay). All these examples show that HPP processes cannot be regarded as just when analysed through the recognitional environmental justice based on cases of Western Mediterranean Province.

The backbone of recognitional environmental justice has been the acknowledgement of group differences, especially racial differences, in environmental policy-making processes. However, this research has implied that such an analysis based on racial differences in Turkey's HPP process would be irrelevant. When Turkish politics are brought into greater focus, it is seen that Turkey has not experienced the institutional racism (segregation based on people's colour) as understood in the US context. Indeed, Turkey has still been experiencing numerous domestic issues regarding socio-political statuses of the ethnic and

religious minorities, particularly Kurdish, Alawite and non-Muslim communities since the foundation of the Republican regime in 1923.

For example, Yeğen (2007) and Chapter 5 specified that Turkey's nation-building process through modernisation promoted Turkishness and secularism as the identity of the new country. This led to the subordination of above-listed groups in the Turkish politics. However, when claiming environmental justice in Turkey's HPP policies, it has been seen that the proposed projects prioritised water availability and hydropower potential, not the ethnic or religious composition of the surrounding communities (Interviewee 28). When the Figure 5.1 is revisited, it is clearly seen that HPPs are concentrated in the Black Sea Province, especially Eastern Black Sea area, and Mediterranean Province, including case study areas of this research, as also indicated by the DSİ officials (Interviewee 28). HPPs are not particularly seen in the Eastern and Southeast Anatolia, which are predominantly populated by the minority populations. HPPs are clustered in the regions which are not composed of ethnically and/or religiously minority populations. In fact, they represent the majority of the Turkish nation, where people are ethnically Turkish and religiously Sunni, and, most importantly, ideologically statist, as clearly highlighted by all local interviewees when they narrated their HPP experiences.

Such distribution of HPP projects across Turkey portrays a unique analysis when compared to environmental justice studies. This research does not revolve around the analysis of (non)recognition of neither racial, ethnic, religious and minority groups nor indigenous cultures constituting the majority of environmental justice literature (see Chapter 2 and 3). In different HPP cases of Turkey, these notions, as well as gender, income and age, would be very relevant to the analysis of specific cases. Yet it would be misleading to say that Turkey's HPP policies deliberately targeted any one group of people. That being said, they do have implications on racial, ethnic, and religious minorities; on the elderly; and on the poor. Recalling Turkey's modernisation process and HPP processes in case study areas, a different set of relations of is proposed for oppressed-dominants or group differences who are systematically neglected in the HPP process, and this is based on the notion of **rurality.** This idea will be articulated in the rest of the chapter and was explicitly highlighted unanimously by local interviewees.

### 9.2.1 Rurality in Environmental Justice Literature

As a contested concept, rurality (sometimes referred to as countryside) does not have a singular definition and its different meanings depend on the socio-spatial context it is bound to (see Woods, 2013). In the relevant literature, attempting to show its multi-dimensionality, scholars such as Cloke (2003, 2006), Murdoch (2003) and Woods (2005, 2009) provide overviews on the most common definitions. Accordingly, they indicate that rurality is sometimes regarded as a fixed territorial entity predetermined by administrations (depending on census tracts and statistical data), as opposed to urban (see Winter, 1996). Another group of research tends to consider rurality within a political economic approach, in which they 'position the rural as the product of broader social, economic and political processes (Woods, 2009: 2)'. Strongly related to this group, constructivist ideas influence the definitions and they highlight 'the role of culture in socio-spatial distinctiveness' and how cultures, ideas, behaviours, discourses and symbols 'construct' peculiar ruralities (see Cloke, 2006: 21).

In line with these definitions, 'rurality', as Cloke (2003:2) writes, 'has been conflated with agriculture and forestry, natural beauty, representational scenery and settlements, and timeless values' in different contexts. He adds that rurality is a dynamic context coevolving along with broader socio-political and economic processes. Moreover, he underlines that despite its idealist and idyllist depiction, it is simultaneously associated with negativities that eventually lead to associations with vulnerability. These definitions and debates imply that the current trends in rural studies revolve around the hybridity of rurality (see the hybridity discussion in Chapter 2 and 5). The formulation of rurality reflects multiple socio-natural relations and processes (including, but not limited to, modernisation, globalisation and neoliberalisation, discourses, media coverage, natural disasters, illnesses) simultaneously reproducing rural spaces, cultures and practices (see Murdoch, 2003 and Woods, 2005 and 2009).

The literature into rural studies highlights that rurality is more than a group identity or lifestyle influenced by multiple socio-natural processes, but that it is also aligned with marginalisation and social exclusion (see Cloke, 2003; Woods, 2003, 2005; and Sidley, 2003). For example, as Woods (2003) and Sidley (2003) argue by deconstructing rural movements in the UK, rural communities underline their rurality in their reactions against

policies discriminating against them and in demanding recognition of the characteristics of rurality in the relevant policy processes. Based on this example, 'rurality' can be seen as a factor of group difference based on which a certain group of people are neglected in the policy processes. However, justice studies, particularly environmental justice studies, have so far failed to use this feature as a separate factor of group difference for recognition, despite the fact that there are numerous accounts of socio-environmental inequalities faced by rural communities. For example, when environmental justice literature is revisited, it is seen that there is a tendency among scholars to explicitly reveal unequal socio-environmental inequalities felt by the rural communities, especially the ones pursuing the political ecology tradition (see Martinez-Alier, 2002; Schroeder et al, 2008; Vermeylen and Walker, 2011; Cowell, Bristow and Munday, 2011; Robbins, 2012; and Rodriguez-Labajos and Martinez-Alier, 2015) with particular reference to indigenous communities (see Pena, 2005; Urkidi and Walter, 2011 and Martin et al, 2014). Similar concerns are also voiced in other studies, such as: neoliberalisation and the commodification of nature (see Goldman, 2006 and Heynen et al, 2007), global land grabbing (see Randaria, 2003, Borras Jr et al, 2011 and Muradian, Walter and Martinez-Alier, 2012), dispossession (see Li, 2010) and peasant studies (see Bebbington et al, 2008]) (although these works are not particularly focussed on environmental justice).

In addition to these works, Islar (2012b) highlights that public reactions against Turkish HPPs are struggles over the recognition of rural lifestyles and livelihoods. However, none of these works conceptualises the notion of rurality as a matter of group differences, based on which socio-environmental inequalities are burdened on a certain population. They still emphasise the recognition of group differences based on race, ethnicity, gender, age, identity, lifestyle, income and religion in their analyses, however. The Turkish HPP cases and field studies in this research highlight this fundamental challenge to environmental justice literature by reinforcing the notion of rurality as a matter of group difference, or set of relations between suppressed and oppressed, which needs to be recognised in the environmental policy-making processes. This point was asserted by all local interviewees. This challenge not only requires the explicit recognition of the notion of rurality, but it also requires the particular needs and interests of rural communities to be addressed in policy processes. Hence it appears that numerous policy practices of Turkey, including the HPPs, have eventually affected these rural communities more than urban dwellers. HPPs cause significant socio-economic,

cultural and environmental problems for rural communities, since their rurality and their specific needs and interests bound to them have not been recognised during policy processes, which are shaped by multiple socio-natural relations and processes (see Chapter 5).

All of these points imply that the recognition of rurality as a group difference in environmental justice analyses is too obvious to neglect. Though it has never been conceptualised, it may be the key factor of negligence, rather than other frequently-covered factors. The rest of this section focusses on this point and conveys the idea that the non-recognition of rural communities and the notion of rurality are fundamental structural inequalities in Turkey's HPP process, particularly due to the modernist legacies embedded in Turkish political and administrative life.

### 9.2.2. Recognition of Rurality in Turkish Modernisation and Politics

The modernisation process is strongly connected to industrialisation and capitalist expansion, as a result of which society is believed to be emancipated through social change and progress, as Kaika (2005) underlined. In addition, modernisation is considered as a visionary perspective, highlighting that the pursuit of modernist vision promotes a positivist stance in policy-making processes (Scott, 1998). This ultimately results in social engineering and 'a rational design of social order' (Scott, 1998: 4). In its implications in Turkey, modernisation—embedded in the process of industrialisation and explicitly aiming to bring social transformation in Turkey—has redefined the relationship between dominant and oppressed in the Turkish society. In these set of relationships, the Turkish state traditionally emerges as the 'dominant' (see Adaman, Akbulut and Arsel, 2014). That is to say, modernist ideology has enabled the Turkish state to traditionally plan and implement policies, ultimately aiming at the attainment of economic development and social progress (Adaman and Arsel, 2005). The central role of the Turkish state still remains at the political level, yet private sector has also become an influential and dominant actor, as a result of the introduction of neoliberal policies in the policy processes (Shambayati, 1994 and Peet and Hartwick, 2009).

Turkish citizens, especially those thought of non-modern, those that put their Islamic and/or Kurdish identities prior to Turkish identity, and those that pursue traditional lifestyles, have

represented the subordinates. That is to say, the needs, social statuses and lifestyles of certain groups such as Islamists and Kurds have not particularly been addressed in the policy processes of Turkey (see Mardin, 1997). In fact, these communities have been perceived as obstacles in the process of Turkish modernisation (see Bozdoğan and Kasaba, 1997).[39] However, in this literature, the notion of rurality has not been analysed deeply, although most studies implicitly agree that rural communities and the notion of rurality have also been subordinated through the modernist policies, due to their association with the 'traditional' and 'old' (see, for example, Nalbantoğlu, 1997 and Demirtaş, 2013).

The concept of rurality, and how its association with 'traditional' and 'old' ideals need to be specified in the Turkish context, since 'different countrysides are [culturally and naturally] different' (Cloke, 2003: 2). As seen earlier in Chapter 6, the distribution of vulnerabilities has been centred on the features of rural life in Turkey and the Western Mediterranean Province. Rurality in Turkey is associated with traditional lifestyles, small or medium scale agricultural production, aging population and different sets of social rules and norms depending on the customary practices. All of associations can be observed throughout the entire country, regardless of the ethnical and religious differences, although these practices and perceptions may differ. [40] By calling them as 'rural communities', it does not simply refer to agrarian societies, but implicates more complex societies, in which subsistence agriculture constitutes the basics of their livelihoods; traditions dominate social life; the population is inclined to decrease due to domestic migration trends; the population is considered as aging; and, different social relations are preserved (see Chapter 6). These social relations are centred on the notions of village solidarity, collectivity and collaboration, representing 'community' and close interactions between the members of the society, which is the reverse of individualist urban lifestyles (see Chapter 6; see also Keyder and Yenal, 2011 and Gülümser, Baycan-Levent and Nijkamp, 2007). As Akar (2010) also implies, these communities lack adequate public services, transportation services, amenities, technologies,

[39] In the recent Turkish politics, this combination has slightly changed. Since 2002, with the rule of conservative government of JDP, Islamist people retained their statuses in Turkey's socio-political life, while in the same period, Kurdish people's socio-political rights have been improved as well.

[40] When I compare the field study conducted for this research and the previous one that was conducted in Divriği for my MSc degree, this conclusion becomes relevant.

education and security. Hence such features characterise Turkey's rural communities and rurality, and present their complexities.

Modernisation has had mixed implications for rural communities in Turkey, involving both advantages and disadvantages. It was economically positive for them when protectionist state policies in agriculture were implemented (see Keyder and Yenal, 2011). These consisted of generous subsidies and purchase guarantees granted between the 1920s and 1980s to support agricultural production (see Yavuz, 2005; Keyder and Yenal, 2011; and Öztürk, 2012). Agricultural production had been the biggest portion of the Turkish economy, and had been mainly run by small- or medium-scale rural producers (Yavuz, 2005; Keyder and Yenal, 2011; and Öztürk, 2012). Indeed, the main motivation behind such incentives can be considered in line with the attainment of the ultimate goal of economic development along with modernist notions, as agriculture was the backbone of the Turkish economy (see Boratav, 2012). On the other hand, it can be suggested that Turkish state's social engineering vision, aiming to modernise the traditional society, mainly targeted this rural population, paving the way for socio-cultural impositions on rural communities.

As highlighted above, the 'rural' society was perceived as 'traditional' and 'old', and the Kemalist elite considered rural societies as an obstacle to societal transition into 'modern' and 'new' ideals (Nalbantoglu, 1997). For example, the Western European lifestyle was promoted throughout the country during this transition process. A 'civilizing mission' was initiated, which involved groups of people charged by the central government to promote Western lifestyle in villages and tell people how to behave in social life (Nalbantoğlu, 1997; Kasaba, 1997). This intervened in the ways they talk, eat, wear and sit in their social lives (Nalbantoğlu, 1997; Kasaba, 1997). This mission was institutionalised through 'village institutes', which were officially founded in villages in the 1930s and 1940s, and were 'specifically aimed at educating the rural population, but broader aims included also a modernisation of social relations, improvements in agriculture and reduction of poverty' (Hilton, 2012: 18). Such efforts arguably aimed at transforming traditional-rural cultures, livelihoods and lifestyles into modern ones. During this process, attractive urban centres offered job opportunities in industry and service sectors. Better social opportunities, like infrastructure and education, have been created and urbanisation had been promoted in Turkey (Bozdoğan and Kasaba (eds), 1997; Bozdoğan, 2013; Turan, 2013). Along with this

modernist vision, Turkey's urban population has been steadily increasing at the expense of rural areas since the 1950s. During this time the proportion of rural population dropped from approximately 75% (1950) to around 25% (2009) (The Ministry of Agriculture and Rural Affairs, 2013).

Local and professional interviewees' narratives about their experiences in Turkey's HPP process have revealed key policy implementations introduced since the 1980s, controlled by the modernist vision of the country. Professional interviewees, such as Interviewee 1, 11, 13, 21 and 30, explicitly indicated that rural communities have been facing serious challenges as a result of the political-economic developments occurring since the 1980s. Local interviewees also complained that similar state policies deteriorated the socio-economic and environmental conditions in the rural areas (see, for instance, Interviewees 3, 16 and 17). These interviews and field studies suggest that the HPP issue lies within the broader political-economic changes in Turkey, which have (un)intentionally led to the subordination of rural populations by undermining their rurality. Policies challenging rural populations and the notion of rurality can be classified under three major issues from interviewees' references: ***the introduction of neoliberal policies to the agriculture; improvements in the construction sector (and acceleration of urbanisation)***; and; ***legal adjustments, facilitating the extractive industries in Turkey***. It should be noted that neoliberalisation of world politics cannot be separated from the modernisation process. In fact, neoliberalism is defined as a contemporary version of modernisation, or as 'neo-modernisation' (see Levermore, 2010: 231; see also Sachs, 2005 and Peet and Hartwick, 2009). In other words, like modernisation, neoliberal ideology also aims at social and economic transformations based on Western socio-economic and cultural values and it achieves these aims through rational and technocratic policy-making processes (see Goldman, 2006). This relationship between the two should be kept in mind when analysing these policies in Turkey.

Firstly, ***the introduction of neoliberalism to the Turkey's agricultural policies*** in the 1980s decimated the rural populations (Keyder and Yenal, 2011). The change also further defined the dominant and oppressed sections of the Turkish society (Keyder and Yenal, 2011). According to Yavuz (2005), due to neoliberal policies, Turkey has left protectionist agricultural policies, and has lowered subsidies and state's support in agriculture. This took away the economic advantages of rural populations. These changes were brought about by

neoliberal policies, which require the state to step back from the market's functioning and incremental relations with global institutions such as the WB and IMF and EU (see Chapter 5). The interactions and policies promoted by these institutions have restructured Turkish agriculture based on efficiency and profitability. They viewed small-scale traditional ways of agriculture as detrimental to efficient and profitable production and ultimately aimed to integrate local production schemes into the global market (Yavuz, 2005; Keyder and Yenal, 2011 and Öztürk, 2013, see also Peet and Hartwick, 2009 for the global reflections). These interactions also promoted the private sector as a new actor in the country's dominant and oppressed relationships. [41] These small-scale farming schemes in the rural parts of Turkey, once constituting the main fabric of the Turkish society and (rural) culture, have been challenged by governmental policies that subsidise large-scale production (Öztürk, 2013). As a result the degree of cultivation by small farmers has decreased, while large-scale producers have steadily increased since the 1980s (Öztürk, 2013). Local interviewees confirmed these impacts of neoliberalisation in agriculture, while frequently complaining about the lack of subsidies and governmental support for their subsistence agriculture that they and their ancestors had once enjoyed. It can be inferred that the impacts of these developments in the agricultural sector, the main source of livelihood for rural populations, were drastic for the rural populations and the notion of rurality, especially in economic terms. These impacts were also observed during the field visits.

Following these trends, rural populations and the notion of rurality have faced further challenges, especially since the 2000s. It is this period, during which the construction sector has been further improved; urban life has been promoted; and, socio-environmental degradation related to extractive and construction industry has increased. These issues are mediated through the neoliberal vision, and reflect modernist notions of social progress and economic development.

It is essential to highlight these **improvements in the construction sector in Turkey (and acceleration of urbanisation)** which have recently become a pillar of the Turkish economy since 2002. In fact, this period is sometimes called as the 'construction boom' (Balaban, 2012). Approximately 20% of Turkey's GDP came from construction-related activities by

[41] These issues are felt in the similar ways at the other developing nations as well. See, for instance, Wolford (2007) for the example of Brazil.

2013 (Colombo, 2014). This boom can be empirically displayed through the massive urban renewal processes, featuring constructions of numerous residential sites in Turkish cities. These constructions were initiated by the state through Housing Development Administration of Turkey, along with the constant constructions of infrastructures such as the renewal of highways and energy projects, including HPPs. All of these projects have been proudly presented by politicians in their declarations and election campaigns. For example, President Erdoğan frequently praises his government's success in building '17,000-kilometre-long roads' in the last ten years (see *Ahaber*, 2014). He also proudly promotes his 'crazy projects', most notably the construction of a canal, resembling like the Bosphorus in İstanbul, as a monumental constructions; he also aims to construct 500,000 dwellings by 2023 (*CNNTURK*, 2011). These claims reflect the modernist legacies of mastering nature and creating monumental constructions.

Such policies have also accelerated ongoing urbanisation trends in Turkey (see Section 9.2.3 below for detailed discussion on this topic). Accordingly, between 1980 and 2000, the rural population of Turkey decreased from 56.1% to 35.1%, and decreased further to 8.7% by 2013 (TurkStat, 2014, see also Öztürk, 2013). This demonstrates how urban life and urbanisation (at the expense of rural life) is promoted by the state to facilitate 'the locomotive of the Turkish economy' through the improvement of the construction sector (Eroğlu, *Haber7*, 2014). This sector has been extended to the rural areas through the HPP constructions, as argued by Interviewee 1 and the participants of Group Interview 8. It could be claimed that this expansion of the construction sector has contributed to the deterioration of socio-economic and environmental conditions at the rural parts of Turkey, as shown in Chapters 6, 7 and 8.

Thirdly, the ***legal adjustments facilitating the extractive industries*** implemented in the last decade, arguably favour large-scale businesses at the expense of rural populations, regarding the administrative statuses of villages and the state's lands, renewable energy generation, including HPP developments, and mining activities. Through the incentives and subsidies enacted in numerous legislations, the challenges facing rural populations, their cultures and livelihoods have intensified. These incentives have particularly extended the abovementioned construction boom to the rural areas of the country, as highlighted by interviewees such as Interviewee 11 and Group Interviews 1, 2, and 4. These challenges to

the rural life have been caused either by burdening rural populations with new taxes, as seen in the case of the introduction of Law on the Metropolitan Municipality (No. 5216, 2004, extensively amended in November 2012 which named 'villages' as 'districts'), or by deteriorating their socio-environmental conditions as seen in the rapid expansion of extractive industries in Turkey's rural areas (see Law on the Renewables, No. 5346, 2005, as one of the main legal frameworks governing HPP process). Above all, these legislative changes embody modernist notions, justifying the mastery over nature for the sake of the realisation of the modernist dreams, while also extending construction activities to the rural areas of the country, as shown throughout this research. These examples and field results show that recent governmental policies seem to fail to recognise or respect rural communities' needs, interests or the notion of rurality. Instead they make rural communities more vulnerable by restricting their cultural representations, livelihoods and homelands (see Chapters 6, 7 and 8; and also Hamsici, 2010; Islar 2012a and 2012b; and Erensu, 2013).

### 9.2.3. Recognition of Rurality in Turkey's Modernisation and Politics: The Case of HPPs

The abovementioned developments are reflected and solidified in the country's recent HPP policies, which have introduced further challenges to rural communities and the notion of rurality. For example, HPPs can be examined together with neoliberalisation process as the electricity market has been reformed through neoliberal notions, while incentives are provided for the private sector to attract them to the HPP market (see Chapter 5). In addition, HPPs cannot be considered separate from the improvement of the construction sector in Turkey, since they complement to this sector, which can also be considered as the extension of the construction boom towards rural parts. Madra (*Business HT*, 2015) respectively specifies in his newspaper interview that

> 'There is a show-off through construction sector [in Turkey]. There are questions [about it]: How many of HPPs and dams have been constructed to produce electricity? How many of them are only construction investments?'

Moreover, legislative changes and the promotion of extractive industries are mainly utilised to spread HPPs throughout the country, as previously shown through case studies.

The scope of the HPP development, estimated approximately as 2000 small-scale HPPs in every corner of the country (Islar, 2012a; and Figure 5.1), shows that these policies do not target particular ethnic, religious or gender groups, but they impinge upon rural communities. This point has been raised by almost all interviewees in different forms, regardless of their political, economic and social interests, ages, expectations or education levels. A wide range of interviewees, from the members of the ruling party to environmental activists, have claimed that the HPP process deliberately targets rural populations, whose interests, needs, lifestyles and livelihoods are neglected and participation is hindered in that process. Interviewee 1 explained that

> 'It is not rural population, which is currently prioritised by state policies, it is the ones living the city-centres. State policies are towards the promotion of the rural-to-urban migration…When we look at Turkey's energy policies, agricultural policies and every other rural policies, it is seen that rural producers are aimed at being swept towards cities…If a village does not have water, they [rural people] do not have anything to do, that is to say, they cannot live there, they cannot practice agriculture…This system [through HPPs and other relevant rural policies] has transformed Anatolia's rural part into their backyard [referring to state and private sector] where they control water, soil and everything, they extract minerals, and urban people are characterised as consumers. HPPs are the part of this story, when we see the broader picture. In other words,…the main issue [behind HPPs] is to eradicate the rural life'.

Interviewee 30, on the other hand, gave his opinions on the HPPs at the Black Sea Province and hinted how HPPs fail to recognise the notion of rurality as formulated in this section:

> 'When we operate these projects [referring to HPPs] in Turkey, we harm the most vulnerable human beings [referring to the rural communities]…Since these people are "wretched" in our saying [referring to general Turkish public and perception of them as wretched by the urban people], it is usually easy to impose such things [referring to HPPs] on them, because they can be sometimes bought easily. Sometimes it is hard, even harder, too, because they have nothing to lose…and they are ready to battle [against HPPs]. The "wretched" may suddenly become "arduous". This is the case in the Black Sea [Province], because these people feel imprisoned there and they have certain lifestyles, which they are unwilling to ruin. They already scrape a living there and they do not want to see their values faded away from them. People living there have a luxury which urban people are deprived of. They are privileged to live in a tremendous nature. Imagine, is it better to sit in front of your house to listen to the flowing stream and whistling finches while eating your freshly baked corn bread, or is it better to speed up your Mercedes using fossil fuels on the highway? This is the problem. There is a serious difference of lifestyles and in my opinion that [rural] life is better than what is proposed to them [urban life] for the sake of development.'

Group Interview 8's contributions also implied the negligence of the notion of rurality by Turkey's the HPP process:

> 'So there are around 2000 HPPs and 500 of them are planned within the Black Sea [Province]…When you consecutively construct multiple HPPs, you destroy the notion of environmental justice. Negligence of aquatic ecosystems, agriculture and water rights of local communities for the sake of advancing the construction sector is the example of environmental injustice in the HPP processes…Despite the amount of HPPs located in Black Sea, those people [in Black Sea Province] are not provided with electricity or cheap energy… [On the contrary,] Their living spaces and water rights are taken away from them in return of nothing.'

These statements emphasise that recognitional issues of the HPP development mainly rely on the notion of rurality in the Turkish context in which rural communities are subordinated at the expense of development policies addressing urban needs, which can help to understand the field results presented in Chapters 6, 7 and 8.

Instances of this recognitional aspect of HPPs are raised by almost all interviewees in case study areas, where they frequently highlighted that 'rural people are ignored in the HPP processes'. Interviewee 2, for example, complained about the operationalization of this process in which, for him, the state and company 'assume as if the land is empty, when they implement such policies [the HPPs]', referring to the Kargı-Yanıklar HPP. Interviewee 3 supported this outlook by describing rural policies of Turkey, particularly the HPP phase:

> 'The mentality in Turkey [regarding policies concerning with the rural and the environment] defines local people, rural people as 'cannibals', meaning that they ruin everything [according to policy-makers]. Depending on this mentality, they [rural populations] are intended to be eradicated [or swept away through HPPs and nature conservation policies]'.

These two comments outline that in general rural populations are against HPP policies. They think the HPP process intentionally targets them and excludes them from policy processes that are directly related to their lives. Accordingly, it could be claimed that this mentality, and the fundamental non-recognition of the notion of their rurality, eventually contribute to the creation of socio-environmental inequalities in this process. Alongside this, rural populations continue to be subordinated through policies infused by modernist and neoliberal ideologies. This point can be furthered by examining the public information processes, water use right agreements and expropriation issues experienced in Turkey's HPP processes in line with the interviewees' contributions.

Firstly, the negligence of the notion of rurality can be further articulated by bringing the public information processes in the HPP cases into greater focus. This research highlighted that local communities were not informed adequately prior to HPP constructions, and their participation was not particularly sought by companies and the state in case study areas (see Chapter 8). Group Interview 7, Interviewees 6, 7, 28, 32 and 33 confirmed that the DSİ does not consult/inform local communities regarding these HPPs (and other hydro-constructions), since the DSİ has the expertise and necessary technical knowledge in planning and implementation of such constructions. For example, Interviewee 6 claimed that 'if DSİ decides on a project, it means it is appropriate' when he was arguing against the public information and participation processes since they are 'unnecessary'. Similarly, Islar (2012b) indicated that officials and companies tend to overlook local communities, since they consider them as 'illiterate'. This results in the implementation of HPPs without adequate information, and disrespects local knowledge. This rationality behind these DSİ policies in the HPP process can be analysed by revisiting the fact that around 2000 of HPPs have been planned and implemented within this policy, without the recognition of the needs and interests of rural communities. This led to significant socio-environmental turmoil at the construction sites, as seen in this research and Hamsici (2010), Islar (2012a and 2012b), Eryılmaz (2012) and Erensu (2013). It appears that the nature of Turkey's HPP processes inherently disregards rural communities and local knowledge (by attributing them as illiterate and not valuing their potential contributions), above all, the notion of rurality.

Secondly, the water use right agreements signed to realise HPP constructions in Turkey barely reflect the notion of rurality, or respect the needs and interests of rural communities. When these agreements (templates are available online) are analysed, it can be seen that they require companies to prioritise the provision of water for drinking and irrigation for the local communities, while ensuring the release of 10% of the minimum flow of the riverbed to maintain the needs of the ecosystem. Although those provisions appear to recognise the livelihoods of rural communities, agreements in their final version they do not specify on the amount of water to be allocated for the rural communities (see the original copies of two agreements for Yuvarlakçay and Kargı-Yanıklar cases). Interviewee 32, as an engineer working at DSİ's headquarters, specified that

> 'Other water users are aggrieved at the expense of HPPs through water use right agreements. There cannot be any changes in these agreements for 20 years apart from the provision of drinking water.'

Interviewee 7's arguments on water use rights agreements revolve around the flaws in measurement of water in the HPP processes. He also highlights the non-recognition of the notion of rurality in those agreements:

> 'When they measure water [to be used in the HPPs], the biggest mistake they do is to consider water through its annual flow. For example, you construct a facility capacity of which is 10 $m^3$/s. When there is a flow of 150 $m^3$/s, flood, 140 $m^3$/s of it go in vain, but if you calculate based on annual flow, you consider that flooded water as if it is going to be utilised as energy… [On the other hand,] we say that minimum flow is 10%. Why not 9% or 11%? It means that natural life is not thoroughly investigated prior to the projects…Locals hold worries that this 10% will not be provided. In other words, citizens do not know what is going to happen to them [in the HPP process]…Under these circumstances, locals worry that their trees will be cut, water will completely disappear, irrigation will be over, their animals will not be fed by water.'

These statements were exemplified through the Yuvarlakçay case in this research. For example, the village of Zeytinalanı, which was entitled to get 15 % of Yuvarlakçay for irrigation in 1991, was completely excluded in the planning process, and was not attributed in the initial project plans (Çobanoğlu et al, 2014). This led the *mukhtar* of this village to write a petition to the Local Governorship to remind them of their existing rights (see the copy of the petition in Çobanoğlu et al, 2014; also indicated by Interviewee 8). All of these examples imply that water use rights agreements fundamentally disregard the needs and interests of rural communities, while also challenging the notion of rurality.

These arguments regarding water use right agreements and their recognitional aspects can be further clarified by bringing their relationship to customary water use into greater focus. Water use rights agreements are prepared and signed by the DSİ and companies, in line with the 2003 By-law. This passes the water use rights to the private initiatives to generate electricity for a certain period of time ranging between 10 and 49 years, holding an option to be further extended to 98 years (Harris and Islar, 2013; confirmed by Group Interview 7). This agreement is a prerequisite for companies initiating HPP processes at the local level. As discussed by Harris and Islar (2013), these agreements mark a significant change in water use practices at the local level, which is generally governed through customary practices. The Turkish state owns the country's water resources, and state intervention has been minor regarding individual water usage for irrigation and domestic needs in its rural parts, where most of the practices depend on customs (Svendsen and Nott, 2000). Accordingly, rural

populations, as verified by the local interviewees, meet their water needs either by building traditional small canals to divert water from the rivers; by constructing wells to obtain groundwater; or by paying a reasonable amount of annual-fee to irrigation associations. These are legal bodies ruled by locals that ensure the equitable distribution of water for irrigation in the villages, through the irrigation canals constructed by the DSİ. The participants of Group Interview 1 state that they consider issues such as urgency, type of crops, and the size of land of each other's when they use either of abovementioned methods to obtain water in their villages. They believe that these systems work fairly, and rural communities generally respect the needs of the others. The statement of one participant of Group Interview 1 that 'I cannot intentionally take more water when I am aware that my neighbour needs it' confirms the kind of mentality that lies behind this rural water allocation. [42]

The water use right agreements have had a drastic impact on these customary practices, which can be associated with the recognitional issues revolving around the negligence of rurality. Accordingly, the report of FCCI (2013) highlights that Fethiye is the 4$^{th}$ most agriculturally productive town of Turkey, and generates 1.16% of the Turkey's agricultural production. The same report also states that the majority of the irrigation of the town (58%) is met by individual efforts, while the rest is provided by the state. This implies that in one of the most productive areas in Turkey rural communities do not heavily depend on the state services for irrigation. On the contrary, they generate most of the irrigation through their own efforts. When the basin's water use rights are transferred to a third party, which is contextually the HPP company, the customary water use rights of rural people, their culture based on solidarity and collaboration and their livelihoods, which depend on water availability, seem to be neglected in the HPP process. This is at least in the case of Fethiye (see Interviewees 3, 4, 11, 16 and 18). This transfer in water use rights could consequently result in socio-economic disadvantages for these communities by converting water into a private property, which would decrease their utilisation from those streams. Essentially, these water use rights

[42] Here I do not say that in the entire Turkey, these systems work perfectly. On the contrary, there are several disputes and socio-ecological disasters associated with these systems, especially due to the functioning of irrigation associations (see Kadirbeyoğlu and Kurtiç, 2013). However, the main reason of these problems can be seen as the absence of a water law in Turkey, rather than these practices. The point I am stressing is that the villages I had a chance to visit seem happy with the existing allocation practices, depending on customs and traditions.

agreements neglect the notion of rurality and prioritise socio-economic interests of the state and industry, as inferred from this research and shown by Interviewees 7 and 32 above.

Thirdly, examining the expropriation/appropriation processes in Turkey's HPP process provides further insights on the conceptualisation of the recognition of rurality. Firstly, it could be claimed that the expropriation process itself leads to socially and environmentally unjust situations for rural communities, as analysed in previous chapters (see Chapters 6, 7 and 8). An overview of recognitional issues related to expropriation processes can be found in Kadirbeyoğlu's (2010) analysis of consequences of the expropriation processes. Kadirbeyoğlu (2010) analysed the construction of Atatürk Dam in Turkey's Southeast Anatolia Province, in which locals were compensated with a low amount of money. They were also forced to migrate, since their lands were taken away from them without the provision of adequate consultation on how they would sustain their new lives. As a result, these locals became outsiders, renters and consumers in their new homes, rather than remaining as locals, landowners and producers in their former lands (Kadirbeyoğlu, 2010). Similar issues and worries have been raised in the HPP processes of Western Mediterranean Province, which can be directly associated with the misrecognition of the notion of rurality. Interviewees 12, 13 and 14 were lawyers working on the HPP cases around Fethiye. They underlined that the amount of money transferred to the landowners was low, and did not recognise the needs of the landowners or their long-term economic interests in the expropriation process.

The expropriation process was conducted without obtaining the consent of the landowners (which is not required according to law No 2942 (1983)) and without recognising their livelihoods. This process obviously did not respect the specific needs and interests of the rural communities, or the notion of rurality itself. For example, in Palamut Village, near the Saklıkent HPP, the HPP attempted to expropriate vast fertile agricultural lands for its construction. When interviewing four farmers who were practising agriculture on these lands, they unanimously said that they were offered low amounts of money. Furthermore, no alternatives for their futures were offered when the expropriation issue was a hot topic in the village. One of them indicates that 'it is not just the land, we also talk about our crops on these lands, which were not counted in determination of our land value'. They also underlined

that they would be against the expropriation even if the amount of money was increased, since they were happy with their current lifestyles and livelihoods.

In the Turkey's HPP processes, the expropriation issue is not only limited to the confiscation of private lands. Leblebici (2012) describes how the state issues permissions for private initiatives to appropriate Treasury lands and forested areas for their projects under the notion of 'public benefit', into which HPPs are generally classified. The Yuvarlakçay case is a good example of this. According to the construction company's brief sheet informing about the proposed HPP, 89% of the project site was on Treasury and forestry lands, while the rest was privately owned. Pınarköy, the village where the proposed construction site was located, is classified as a 'forest village', where most of the locals do not have land titles, but have been permitted to live for generations. In other words, although most of the locals do not own the spaces that they live in, work and enjoy, it is customarily given to them under certain conditions. These mainly require them not to extend their dwellings and agricultural lands and not to harm the forest (see Chapter 8). However, this HPP process in Yuvarlakçay could confine the locals' livelihoods, dwellings and recreational-cultural practices when the state lands are officially handed to the private ownership. Furthermore, the locals would not be eligible for expropriation fees or state-led resettlements due to the non-existence of title deeds for such lands.

These HPP-bound processes of public information, water use rights agreements and expropriation reveal numerous socio-environmental injustices, reflecting the non-recognition of the notion of rurality. The investigation of deep causes of these injustices cannot be separated from modernist ideology (and, in this case, Turkey's modernisation process). Socio-political developments paving the way to the implementation of HPPs have been influenced by Turkey's modernist agenda in the justification of the subordination of rural communities and the notion of rurality. Turkey's modernist agenda has been perfectly manifested in the missions and visions of the DSİ and its policies, including HPPs, which fail to capture the notion of rurality in the policy processes. Indeed, since the 1980s, such processes are explicitly facilitated through neoliberal policies, since neoliberalism enables modernist notions to prevail in contemporary politics in a different form (see Peet and Hartwick, 2009). The ways neoliberal policies actively promote modernist legacies, including fetishizing (and resurrecting) rationality, scientific knowledge, technocracy and

human superiority over nature at the different scales (see Scott, 1998; Kaika, 2005; Goldman, 2006 and Peet and Hartwick, 2009). It could be claimed that these modernist legacies, served through neoliberal policies, are the main drivers behind HPP policies and processes, and aid their subordination of the notion of rurality and the needs and interests of the rural communities. The modernist legacies of rationality, technocracy, the superiority of science and human mastery over nature shape the HPP processes of Turkey. These legacies lead to socio-environmental inequalities based on the negligence of the notion of rurality and the specific needs and interests of rural communities.

These modernist legacies can also easily be detected within public information processes, water use rights agreements and expropriation processes. Local communities have predominantly not been informed or included into HPP processes, and the official depiction of local communities as 'misguided' or 'illiterate' imply rationality, technocracy and the superiority of science in these processes. Early modernist policies tended to associate rural communities with 'old' and 'traditional' ideals. The social engineering introduced during the early republican regime had already targeted the social transformation of these groups, since their 'old' and 'traditional' portrayal did not correspond to the country's modernist agenda. Numerous social reforms impinged upon the Turkish society to explicitly transform it into a 'modern' and 'western' society, which were strictly implemented with a top-down approach (see Bozdoğan and Kasaba (eds.), 1997; Adaman and Arsel (eds.), 2005). For example, rural communities were educated to behave in a Western in the public sphere because this made sense for the policy-makers, and it was rational and necessary in attaining Turkey's modernist goals (Nalbantoğlu, 1997; see also Demirtaş, 2013, Bozdoğan, 2013 and Turan, 2013). Such cases prove that early republican regime's reforms have been shaped through rationality, which has inherently disregarded the notion of rurality and overlooked the rural communities in policy processes because these people were 'illiterate'. This is also seen in the HPP processes.

Along with the settlement of such rationality in the Turkish politics, water has been one of the specific policy domains in which rationality, technocracy and the dominance of science have been officially incorporated into policy processes. As the vision and mission of the DSİ (2015) clearly indicates (as well as Interviewees 6, 7, 28, 32 and 33 and Group Interview 7) water policies are prepared and implemented with a strict top-down approach in Ankara,

while the efficient utilisation of Turkey's water sources are being constantly emphasised along with the latest technological developments. Accordingly, central planning, technical capacity and implementation of water policies are officially introduced as the main strengths of the DSİ, while their operations are run through 'desktop studies' in Ankara (Interviewee 7). Since such modernist legacies prevail in the DSİ's operations, it traditionally does not consider public information or social aspects for these water policies because 'DSİ knows the best for the citizens' as indicated by Interviewee 28. Furthermore, the rural communities are 'illiterate' as demonstrated by Islar (2012b).

The DSİ prioritises rationality, science and technology over local knowledge or peculiarities in policy processes like water use rights agreements or expropriations. This prioritisation is evident from the constant references to numerical calculations and numbers of projects made by employees and even ministers, rather than the other issues revolving around people's rurality in their narratives (see Chapter 5). For example, DSİ signed water use rights agreements (presenting identical conditions for the signatories), planned around 2000 HPPs and initiated expropriations in realisation of these plans (in places that their engineers have never been to), because it makes sense for them, and because it is necessary for economic development. This mentality, inherited by early modernist policies defining rural communities as uneducated, illiterate and traditional, makes their inclusion and recognition appear worthless in the HPP process. In other words, the HPP processes have not recognised the notion of rurality or the specific needs and interests of rural communities, and this can be one of the deeper causes of the socio-environmental inequalities experienced at different HPP sites. This happens because the modernist legacies of rationality, technocracy and the dominance of science prevail in Turkey's water management. The policies reflecting these legacies (possibly unintentionally, but definitely inherently) target at rural communities and the notion of rurality.

In summary, this analysis has shown that the notion of rurality and its negligence in Turkey's HPP process has offered a different set of dominant/oppressed relationships. Following Schlosberg's (2004:519) words, the 'lack of recognition' of the notion of rurality and the specific needs and interests of rural communities in Turkey's HPP process has led to 'various forms of insults, degradation, and devaluation at both the individual and cultural level'. Accordingly, the Turkish state's conventional focus on achieving its modernist goals of

economic development and social progress, as well as its commitment on modernist legacies such as rationality, technocracy, the dominance of science and mastery over nature, inherently attack rural communities and the notion of rurality, as seen in the HPP cases. Policies like the introduction of neoliberalism to agricultural politics, the extension of the construction sector and the expansion of extractive industries set the scene for the widespread implementation of these HPP policies. These policies have already undermined rural communities and their peculiarities, and have created social and environmental injustices. These injustices can be seen by examining public information processes, water use rights agreements and expropriation processes. This analysis also reinforces the recognition of the notion of rurality. Rurality should be reinforced as a particular group difference within the environmental justice literature when addressing the deep causes of the socio-environmental inequalities faced by rural communities.

### 9.3. Discussion II: Interpreting Distributive Environmental Justice in the Turkish context and its HPP Process

The abovementioned articulation of rurality as a group difference in Turkey's political life (and in its HPP process) can be extended by exploring the deep causes of distributive aspects of environmental injustices experienced during the HPP process within Turkey's modernisation. The HPP processes of Western Mediterranean Province are likely to lead to the disproportionate distribution of environmental benefits and burdens at the expense of rural communities. In this regard, analysing the distribution of environmental risks in the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases was key to demonstrating the (potential) socio-environmental inequalities that HPPs (might) cause. This was reinforced by focussing on the existing distributions of vulnerabilities and studying how they would be affected by HPP constructions in case study areas, in relation to local's narratives regarding those processes. Moreover, understanding the local communities' perceptions of the distribution of responsibilities showed their vision of the winners and losers of the HPP process, and deepened the environmental justice claim of this research. It was concluded that these HPP processes, especially Saklıkent, Kargı-Yanıklar and Yuvarlakçay, were likely to deteriorate socio-environmental conditions in those localities. Furthermore, they would deepen the

vulnerabilities of the rural communities, and would make them the ultimate losers of the HPP process.

Although the processes and dynamics of these HPP cases significantly differ in accordance with their contexts, the existing research (Hamsici, 2010; Islar 2012a and 2012b, Eryılmaz, 2012 and Erensu, 2013) and media coverage (for example, *The Guardian*, 2011, see also Chapter 5 for more examples) produces similar outcomes, despite their varying conceptual frameworks. These similarities in the distributive aspects of environmental justice may be interpreted through the policies causing the misrecognition of the notion of rurality and rural communities. As argued by OECD (2011), Yenal and Keyder (2011), Öztürk (2013), Öztürk, Hilton and Jongerden (2014), the neoliberalisation of Turkey's agricultural policies, the expansion of the construction sector and the acceleration of urbanisation and expansion of extractive industries (leading to the HPP policies) have already burdened rural communities and deepened their vulnerabilities (see Chapter 6). Among these issues, especially urbanisation and the prioritisation of urban politics at the expense of rural policies have both had drastic roles in the emergence of the current situation, according to Interviewees 1, 9 and 11 and Group Interview 8.

Turkey has urbanised quickly since the 1980s, which has unsurprisingly overemphasised on the urban politics, as also indicated by Interviewee 1 (see the last section). Interviewee 21 concurred that this emphasis on urban politics can be easily inferred by viewing Turkish TV commercials. She maintained that one in two commercials are about new residential sites and urban renewal projects, promoting compacted living spaces and urban lifestyles (May 2014), while there is nothing like this for the rural ones. This can be aligned with Routledge's (2010) conceptualisation of cities and urban life. Accordingly, he argues that cities are converted to hubs of capital accumulation and investments are largely confined to urban areas at the global scale, due to the fact that they have become the centres of economic, political and media power. This, in turn, has led to cities as becoming consumption hubs too, where '[m]ost of the ecosystem services [are] consumed… [which are] located outside of the cities themselves, often half a world away' (Gomez-Baggethun et al, 2013: 176). Recent policy developments clearly demonstrate that urban transformation is a policy priority for the Turkish state. When examining the party programme and 2023 Vision of JDP (the long-term ruling party of the country), it is obvious that urban investments and urban renewal projects are promoted at the

expense of rural development. For example, the party's 2023 vision has a chapter on 'Food, Agriculture and Animal Husbandry' in which only four very generic objectives are listed, while the chapter on 'Urbanisation' has 23 specific objectives revolving around the restoration and/or construction of infrastructures and mega projects, especially in metropolitan cities (Justice and Development Party, 2015). Interviewee 11's comments can be useful to clarify this point:

> '[When you visit villages] You will see, most of people will be in cities [during the day]. They either have a job based on the city or they dream on moving to cities. This is something that consumption society portrays about cities…That process of evacuation of rural settlements continues…When we live in cities, are we aiming at being productive or are we just going there because the city life is tempted?'

This urban transformation process, including a shift in consumption patterns from rural to urban areas, begs the question of energy in supporting those processes (when coupled with rapid industrialisation). The processes of urbanisation and rapid industrialisation have increased Turkey's energy demand and have extended Turkey's energy deficit (or energy dependency). As justified rhetorically by politicians and state officials (see Chapter 5), energy investments, including coal, nuclear and indeed HPPs, are prioritised in the process of decreasing the country's energy dependency. This process is aimed at addressing its rapid industrialisation, urbanisation and population increase. However, the overemphasis on these energy development projects has been criticised. Interviewee 21, for example, asserted that although officials over-stress that 'Turkey needs energy', they do not have adequate projections on how much energy is actually needed or how it is going to be allocated to the sectors. Relevantly, Interviewee 9 and (the participants of) Group Interview 8, respectively, maintain that

> 'People respect the words of Ankara on "we need energy" or "are we going to live in dark without electricity?" What we say is not living in the dark…Prof Beyza [Üstün, who is a prominent ecologist opposing HPPs in Turkey] asks: you say we need energy and do some projections but depending on what? Is it the industry expanding or production? ...In fact they say population is increasing thus we need that amount of energy in accordance with that, but they do not look at unutilised capacity of industry.'

> 'In my opinion, development has evolved into a debate centred on consumption. In general, it has evolved into a project of converting people into absolute consumers at the point where we say we need energy. But, [when you check how the energy is used], I personally attempted to check how much

> electricity is planned to be used in industry, housing, transportation but there are no clear data about them.'

In fact, energy development projects, including HPPs, have been prepared to address the country's energy needs, and rural areas have become the natural destinations for these constructions (due to their natural reasons). They eventually burden their socio-environmental costs on the rural communities, as described by Adaman (*Business HT*, 2015) as follows:

> 'We are talking about an economic growth which relies on consumption. This has been pumped by borrowing construction and energy investments. While doing that, social and ecological costs have been precluded [at the expense of rural communities].'

Focussing on the distribution of responsibilities in Turkey's HPP process would show the deep causes of the current socio-environmental injustices experienced in Turkey. Based on the analysis presented in this chapter (especially in this section, and also field results and Chapters 6, 7 and 8), it appears that the needs of urban areas and industry, characterised by a higher consumption of goods and services (see Gomez-Baggethun et al, 2013), are prioritised in the HPP process at the expense of the needs and interests of rural communities. Two relatively long quotations heard during the field visits are used to highlight this point. Firstly, Interviewee 9 defined rural communities as 'not consumption junkies as us [urban dwellers]', when explaining how HPPs eradicate the notion of rurality and impinge upon rural communities:

> 'Farming is the lifestyle of many villages here, their livelihood too. In villages, there are people who afford their living with annual income of 3000-5000 Turkish Lira [around £1200]. It sounds unrealistic, but when you live in a village, you understand that it is doable. How? They produce their own food, [they do not pay rent, because houses are generally owned by them], they only pay for electricity, phone bills, sugar and tea. They do not need money for anything else, because somehow they are able to feed themselves. If they cannot, their neighbours will help them…Rurality is their lifestyle, they are used to live with less.'

Secondly, Akbulut (*Business HT*, 2015), on the other hand, explained:

> 'Economic growth always creates inequalities…It always has costs. Here there are also ecological costs, because it is impossible to detach economic activities from nature. Even when entire economy relies on service sector, it impinges upon nature. However, here, not everyone's nature is [equally] affected. [For example,] Where does the energy of growing Turkey come from? We can list a couple

> of regions where energy investments are intensified. İstanbul [,for instance,] has become an industrial centre, but there are thermal power plant constructions [and HPPs] at the greater İstanbul, including Thrace and Çanakkale. This means that growth of a region shadows on the others. People living in those areas will be affected by environmental degradation and they will escape to cities [due to their deteriorating socio-environmental conditions] to become cheap labour. This is growth.'

These statements imply that rural communities are not as consumptive as their urban counterparts, and their activities are not the main reasons for Turkey's energy dependency, needs for industrialisation and/or population growth. Villages are obviously less consumptive than the cities, and the livelihoods associated with these villages (agriculture) consume less energy than the industries concentrated in the urban areas. However energy development policies, including HPPs, burden rural communities with socio-environmental costs and deepen their vulnerabilities, while urban dwellers do not feel such life-changing and dramatic consequences (they only enjoy the benefits, see Chapter 6). Turkey's HPP process actually victimises rural communities and makes them the absolute losers of the process while urban dwellers, industry and the state are the winners (see Chapter 6).

The underlying causes of this situation in Turkey's HPP process can be explained through the dominance of modernisation in Turkish politics. Modernisation's commitment to social and economic transformations, and its stress on mastery over nature through rational and science (technology)-based policies, together reveal the relationship between the urbanisation/promotion of urban lifestyles and HPP constructions. Firstly, modernist ideology intrinsically promotes Western models of development, and it is widely regarded as a Western project (see Giddens, 1991). To be precise, modernist ideology essentially promotes the transformation of economic and social relationships of non-Western communities into Western ones, based on industrialisation and urbanisation (see Fukuyama, 2009). In this sense, the examination of notable modernisation projects reveal that modernising nations prioritise urban development and city-life, as observed in the cases of Brazil (Scott, 1998) and Turkey (Torun, 2013). They also introduce Western modes of consumption and ways of life to their citizens (see Peet and Hartwick, 2009). Situated within this approach, Turkey's HPP process can be regarded as a part of this process.

Policy-makers prioritise urban politics/urbanisation and the attainment of social and economic development, which explains why HPPs are widely implemented in Turkey. Accordingly, urbanisation and socio-economic transformation have been substantiated

through the HPP developments in the rural parts of Turkey. This arguably extends the scope of urbanisation towards the non-urban areas, which is justified through Turkey's energy needs (due to its rapid industrialisation and urbanisation process, Interviewees 1 and 11; see Chapter 5). Modernity naturally subordinates 'traditional' rural communities, whose life philosophy is minimalist and compatible with nature compared to their urban counterparts. This research indicates that modernity burdens these communities with numerous socio-environmental injustices. This occurs at the expense of the realisation of the modernist agenda, and supports the needs of industry and urban dwellers/urbanisation, as seen in Turkey's HPP policies (Interviewees 1, 9, 11, 26 and Group Interview 8).

As discussed in the modernisation literature (see Giddens, 1991; Scott, 1998; Kaika, 2005 and Peet and Hartwick, 2009), rational policies and human activities domineering nature are fetishized in the modernist agendas. This leads to the approval of monumental constructions, including hydro projects or mega cities, and to the superiority of science and technology in the modernising nations as indicators of their socio-economic transformation and national pride (for Turkish case, see Çarkoğlu and Eder, 2005; Demirtaş, 2013; Bozdoğan, 2013 and Torun, 2013). In this sense, the approximately 2000 HPPs constructions being actively promoted in Turkish politics can be viewed as an outcome of this mentality (see Islar, 2012a and DSİ, 2014, personal communication). It appears that the modernist 'will' of mastery over the nature through science and technology is one of the key reasons for the creation of socio-environmental injustices experienced by Turkish rural communities in the HPP processes. In fact, these are the main reasons for the unequal distribution of burdens, benefits and vulnerabilities of rural communities (at the expense of urban communities, who are the main beneficiaries, and for the sake of meeting the needs of urbanisation and industrialisation).

In conclusion, this section showed that when Turkey's HPP process is brought into greater focus, the unequal distributions of socio-environmental burdens and vulnerabilities across the society does not correspond with responsibilities. It argued that modernisation's focus on urbanisation, industrialisation, the urban lifestyle and changing consumption patterns and physical constructions were influential in conceiving these HPP policies. HPPs primarily aim to meet the country's increasing energy demands, in support of its fast-growing industrial and urban needs. However, the HPP processes disproportionately impact on rural communities by burdening them with socio-environmental injustices (see Chapters 6, 7 and

8) and deepening their vulnerabilities. This occurs despite their relatively minor contributions to the emergence of those 'needs' and 'dependencies' due to their less consumptive way of living compared to their urban counterparts. This discussion also reinforced the recognition of rurality and subordination of rural communities in Turkish politics within the context of distributive environmental justice, while also showing the role of modernist ideology in conceiving HPP policies and socio-environmental inequalities.

### 9.4 Discussion III: Interpreting Participative (Procedural) Environmental Justice in the Turkish context and its HPP Process

In relation to local narratives and professional interviewees, participative (procedural) environmental justice was broadly analysed within the context of meaningful participation. The meaningful participation of local communities and nature in HPP processes was controversial for the Western Mediterranean Province. Analyses of the HPP processes of Saklıkent, Kargı-Yanıklar and Yuvarlakçay demonstrated that meaningful participation was not realised, despite its existence in relevant legislations. These cases revealed that locals and nature were not included, and their concerns were not represented in the HPP processes, while also documenting that they were able to influence the HPP processes through their own means, not through the processes facilitated by the state institutions. The Söğütlüdere case, on the other hand, presented a mixed case, in which the company went through with an EIA process in spite of its exemption, and local communities found a platform to negotiate and speak for their concerns yet these processes were also partially flawed.

The problems revealed so far are peculiar to case study areas; however, similar issues are widely seen in Turkey's HPP processes. Interviewee 1 and Group Interview 8 respectively argue that

> 'It [referring to the HPP process] is fundamentally a "rights" issue…Hydrologic cycle has to be realised and it has to serve to that water source, to fish living and feeding from that basin, to the rain, conceived through evaporation from that source, needed by the basin's farmer. Water is the right for humans and all living organisms of that cycle. And the process Turkey's water politics and HPPs brought to us does not recognise that right. In fact, they operate in the worst possible way. It is okay if you [referring to the state] consult people and get their opinions [in the HPP process] and then make a bad decision, but even it is not the case. They seek for neither public nor expert opinion. In fact, [even] EIA reports are full of lies. All EIA reports [in Turkey] are approved…They are copies of each other.

> Thus, the intention [of the state] is not to have an equitable water management and there is no political commitment to ensure it. Even worse, the Ministry [of Forestry and Water Affairs] does not advocate such a [equitable and participative] policy [-making process].'

> 'There are sensitive issues about HPPs…like the existence of national parks, wetlands, forestry areas which represent actual HPP sites. I need to inform you that every single river [stream] of Turkey is projected for HPP development! It raises the question: Do not we have any wetlands or nature protection area or forestry? It is easy to infer that HPPs do not consider what is needed to be considered in the process… [For example,] EIA process has…to be conducted prior to constructions… [but] it remains ostensible…We see cases in which constructions began without completing EIA process…In addition, there are people using that water for their livelihoods from agriculture. They are disregarded too in the HPP process.'

These extracts imply that the general operations of Turkey's HPP processes are not conducive to the components of meaningful participation (see Chapter 8). In contrast to the previous sections' discussion, this non-inclusive nature of the HPP process is not due to the misrecognition of rural communities and the notion of rurality in Turkish politics. In urban areas and urban politics, similar problems regarding meaningful participation of people and nature can be detected. The Gezi Park movement in June 2013, which erupted in the middle of this research, is a good example of such an urban setting. One of the main claims of Gezi Park protestors largely was the non-existence of meaningful participation of people and nature in planning of constructions in the urban areas (Özkaynak et al, 2015). As a result, the roots of these missing points in Turkish politics can be revealed more through focussing on modernisation and modernist legacies (rather than the notion of rurality). This, in turn, portrays how the Turkish state perceives public participation in the HPP process.

As clearly indicated in Bozdoğan and Kasaba (1997) and Adaman and Arsel (2005), policy-making processes are inherently centralised and operated with a top-down perspective. This can be seen in Turkey's HPP process as its operation is introduced at the administrative level, shown below in Figure 9.1. The operation of the process and the roles of the relevant actors are explained in this section, based on the By-law on Principles and Practices on Signing the Water Use Right Agreements for Electricity Production in the Electricity Market (2003). These operations and roles are also concurred by Interviewees 1, 29, 30, 31 and the participants of Group Interview 8.

The DSİ, operating under the Ministry of Forestry and Water Affairs, and EPDK under the Ministry of Energy and Natural Resources, can be thought of as the key institutions governing the HPP process. According to the 2003 By-law and its amendments (and these interviewees), the DSİ and/or EİE (*Elektrik İşleri Etüd İdaresi*, General Directorate of Electrical Power Resources Survey and Development Organization under the Ministry of Energy and Natural Resources, EİE is the Turkish acronym[43]) initially develop the available projects, and DSİ then announces them on its website, where the application process for the companies are detailed (see Clause 5). In these initial steps, companies apply to the projects they are interested in by submitting a letter of indemnity and proving their capacity to undertake the advertised projects (see Clause 6). When completing the applications, the DSİ and EİE require applicants to submit a feasibility report for the projects they apply to (see Chapter 3 of the by-law, particularly Clause 8). If these feasibility reports are approved, successful applicants are informed that they are qualified to sign a water use rights agreement, and the EPDK is simultaneously informed about this decision (see Chapter 4, Clause 10 of the By-Law). Once this decision is made, companies have to apply to the EPDK to get an electricity generation licence. If the EPDK decides that it is appropriate to issue electricity generation licence to a company, it then allows the DSİ to sign the water use right agreement with the company. Then, the company and DSİ sign the agreement, and the EPDK is informed; this finalises the licensing process (see Chapter 4).

The application and licensing are not the only elements of the HPP process. Companies, which sign water use rights agreements with the DSİ, also have to receive the EIA clearance (see the Clause 12 of the 2003 by-law). The most recent by-law issued in November 2014, indicates that each project has to receive EIA clearance from the Ministry of Environment and Urbanisation before investments and constructions of relevant projects can be initiated. This clearance may be in form of approval of the EIA report submitted by the companies or state institutions to the Ministry, which is required for a list of projects named in the Annex I of the By-law, including run-of-the-river HPP constructions with capacities above 10 MW. The ultimate decision is either the 'EIA is positive' or the 'EIA is negative'. Clearance may also be in form of the approval of a file introducing the project to the Ministry, which is evaluated by a method of selection and elimination. Here, when a project falls under Annex

[43] EİE was abolished in 2011, and its duties are transferred to another directorate operating under the Ministry of Energy and Natural Resources, which is General Directorate of Renewable Energy.

II of the by-law including small-scale HPPs (with capacities between 1 and 10 MW), a commission within the Ministry of Environment and Urbanisation gives the ultimate decision. This commission may either decide on ‘EIA required’, meaning that the company has to go through the process implemented for Annex I projects, or the decision may be ‘EIA not required’, which authorises the companies to operate. Projects not mentioned in Annex I and II are not required to go through an EIA process. Other annexes of the By-law refer to the environmental legislation of Turkey, detailing the legal framework regarding the environment that must be taken into consideration by applicants in their EIA process.

Annex I and Annex II are important, as they define which projects have to go through an EIA process, or a selection and elimination process, while unnamed projects are exempted from an EIA process since their environmental impacts are considered as minor. In the case of small-scale HPP developments, according to the 2003 By-law on EIA, projects should go through an EIA process if their capacities are above 50 MW, while those with capacities between 10 MW and 50 MW fall under selection and elimination criteria. This implies that HPPs below 10 MW were not required to follow any of these procedures. According to the 2008 By-law, the HPPs with capacities above 25 MW are required to follow an EIA process, while those between 0.5 MW and 25 MW have to follow the selection and elimination criteria; the rest were exempted from the EIA. Each by-law overrules the previous one and does not include the projects initiated before its issue, leading to complications in implementation.

These by-laws require compulsory public participation meetings for projects going through the EIA process (Clause 9, see the 2014 By-law). In fact, the EIA process is the only time when the public can participate in the policy process (including the HPPs). According to the by-laws, the meeting content, date and place should be announced at least 10 days before the meeting in a local (or national) newspaper. In addition, the meeting is supposed to be convened in the most convenient place for the local people. The purpose of those meetings are indicated as ‘receiving the public’s opinions and recommendations regarding the projects’ (Clause 9, Section 1). Accordingly, the realisation of the recommendations and opinions of the public represented in the public participation meetings is one of the criteria through which the Ministry evaluates the EIA process. If the company fails to provide evidence for the meeting, the EIA process will end negatively, leading them to losing their

license and invalidation of water use rights agreements, as stated in the template water use rights agreements (The 2003 By-law).

However, when examining its implementation, it is seen that the framework fails to achieve a meaningful participation, confirming the claims of Interviewee 1 and (the participants of) Group Interview 8, presented in the beginning of this section. According to a statistical sheet published by the Ministry of Environment and Urbanisation (2015b), 3736 projects under Annex I (not only HPPs) were given 'EIA is positive' status (24% of which are energy projects), while only 33 were indicated as 'EIA is negative' between 1993 and 2014. 47,314 projects analysed under Annex II resulted in the decision 'EIA not required' decision (6% of which are energy projects), and 638 were designated 'EIA required' for the same period. Another official source, a parliamentary inquiry replied to in 2013 (Bayraktar, 2013), clearly indicates that out of 655 energy projects (general), 274 HPPs are given 'EIA is positive' status, while out of 2588 energy projects (general), 1082 HPPs are designated as 'EIA not required'. This response, and other relevant sources, do not clearly indicate how many of the HPPs are granted the status of 'EIA required' or 'EIA is negative'. However, the TMMOB report (2011) indicated that 'none' of the HPPs were given 'EIA is negative' status. This suggests that the number of projects subjected to a proper EIA process is relatively small, which makes meaningful participation controversial in the Turkey's HPP process (see Chapter 8).

Additionally, before companies start to construct power plants, the expropriation process has to be conducted (in the cases which require it). This process is governed by the EPDK, while expenses and expropriation fees also have to be afforded by the companies (Interviewee 31, see also Law No 2942 (1983)). To complete this process, the relevant permits for the HPP construction have to be issued by the Governorships and local branches of the relevant state institutions at the local scale. Expropriation decisions do not particularly seek for the consent of the landowners, especially when undertaken under 'urgent expropriation' (Interviewee 13, see also Law No 2942, 1983). According to Law No 2942 (1983), landowners do not have the right to challenge an expropriation decision, they are only allowed to challenge the value of their property predetermined by the state/ courts. Furthermore, if the lands/properties belong to the state, the company can appropriate it under without seeking public consent (see Leblebici, 2012).

After the completion of these bureaucratic steps and during the HPP constructions, the DSİ (or private companies assigned by the DSİ) conducts the monitoring process (Interviewee 29). The DSİ and the Ministry of Energy and Natural Resources are also supposed to undertake routine controls during HPP operation (Interviewee 29). When it comes to the trading of the electricity produced in those power plants, the Ministry of Energy and Natural Resources offers incentives to companies and purchases their electricity (EİE, 2014). This entire process is depicted in Figure 9.1 below, which also briefly demonstrates the responsibilities of the actors involved in this process.

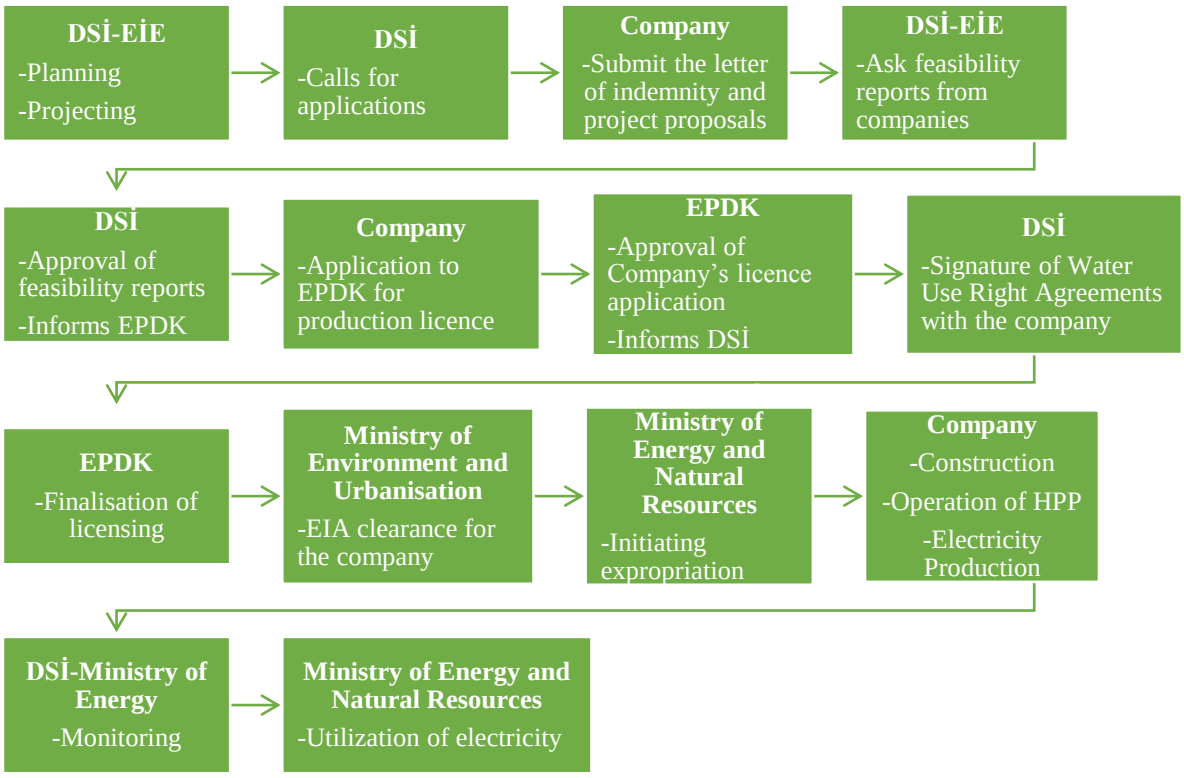


**Figure 9.1:** Overview of the HPP process in Turkey (author's own illustration heavily based on 2003 By-law, also described by Interviewee 1, Interviewee 29, Interviewee 30, Interviewee 31, and Group Interview 8).

The examination of this general HPP process (and Figure 9.1) may reveal that Turkey's administrative traditions have been shaped by the modernist notions. The general HPP process (Figure 9.1) itself is governed through a highly centralised way, as shown by the case studies. For example, potential HPP projects are prepared and planned in the headquarters of the DSİ and Ministry of Energy and Natural Resources (and its affiliated institutions) in Ankara, where companies apply to them and their applications are evaluated and approved

(see Interviewees 6, 7, 28, 32, 33, and Group Interview 7). It is obvious that few actors are included actively in this process, namely the DSİ, the Ministry of Energy and Natural Resources (EPDK and Directorate General of Renewable Energy), Ministry of Environment and Urbanisation, and the companies (concurred by the interviewees cited above). Public participation only becomes the part of the process (after the completion of planning and tendering of the projects) at the later stages of the process through the EIA process. However, as demonstrated through the above cases, not every HPP is subjected to an EIA process (which would ensure meaningful public participation). As the capacities of most of Turkey's HPPs are below legal limits, companies can submit their project files to the Ministry to get 'EIA not required' status without engaging with locals, implying is operated centrally, minimising public participation.

Interviewees 6, 28, 33 and the participants of Group Interview 7 confirmed these points in their narratives, and reinforced the above-pictured HPP process as being the norm. They (and Interviewee 31) highlighted the necessity for more involvement of the DSİ in the entire process, demanding more centralisation. DSİ officials, as argued throughout this research, based their claims on the notion that DSİ has the best knowledge on water, reflecting modernist notions of rationality and technocratic governance. In these interviews, public participation and bottom-up approaches in water management are ignored, while the knowledge of local people has been criticised; they are not seen as being capable to make meaningful contributions to the HPP process since it does not correspond to the technocratic understanding of water management. Interviewee 6, a long-term employee of the local branch of DSİ in Fethiye, for instance, confirmed that the HPPs are actually 'state projects', where it is only DSİ preparing and calling for companies' applications. He tacitly admitted there were deficiencies in the public participation in the HPP process, but blamed this on the companies. Interviewees 6 and 28 said that 'if DSİ approves a project, it means that it is appropriate', they implied that DSİ officials are biased against the public participation, since the projects planned and approved by DSİ are considered as 'appropriate'. It appears that the meaningful participation of locals is inherently not welcomed in water management in Turkey, and centralised and rationalised technocratic water management is perceived as being necessary. Based on such evaluations introduced by DSİ bureaucrats, this also implies the state's expertise in water management, all of which are consistent with the notions hitherto discussed under the banner of modernisation.

Furthermore, these narratives show that these discussions are centred on other modernist legacies, namely national pride and developmentalism (see the Chapter 5 for the discursive analysis of the Turkish HPP process; see also Adaman, Akbulut and Arsel, forthcoming). For example, the participants of Group Interview 7, both of whom currently hold key positions in the DSİ, frequently referred to developmentalist and nationalist elements, when they justified the operation of the HPP process in Turkey. They emphasised that the HPPs and water are our 'national resources', which are 'very important' to be utilised. When they further advocated the HPP process and its centralised nature, they approximately meant that 'if you want electricity, there is a price for that and you have to face with this price', emphasising the prioritisation of the developmentalist approach in the HPP process. [44] Furthermore, Interviewee 6 underlines the importance of 'national resources' in electricity generation; he proposes to 'obtain the maximum energy we can get out of that', which holds both nationalist and developmentalist elements. Interviewee 31 also implied similar issues by highlighting the necessity to 'dam every single brook' to 'afford energy needs of Turkey' for economic development. He demanded that state institutions take more financial responsibilities and initiative for further planning. These examples and analyses show that the modernist legacies of nationalism, and particularly developmentalism still prevail in the recent HPP processes, when its operation is viewed at the national scale. They are used to justify the centralised and top-down nature of the HPP process by these key actors. However, most importantly, this understanding paves the way for the creation of controversial legal frameworks, which enable HPP constructions in the sensitive environments and non-inclusive HPPs. Any action boosting development is justifiable under these circumstances, for which public consent and participation are not necessarily required to be sought (see Group Interview 7, see also Chapters 6, 7 and 8; and key legislations, including but not limited to, Law on Expropriation (No 2942, 1983), Law on Resettlement (No 5543, 2006), the 2003 By-law on Water Use Right Agreements and the 2005 Law on Renewables as well as environmental acts including Law on Forestry (No 6831, 1956), providing numerous exceptions allowing the constructions on ecologically and socially sensitive/vulnerable areas). It could be claimed that the non-participative approaches present in HPP processes come from the modernist legacies of nationalism and developmentalism in Turkish politics.

[44] Due to the positions of the participants of Group Interview 8, the interview was not recorded. However, they let me note down when they were responding, so the quotation is not the exact wording.

Analyses of the local HPP process showed that the locals did not accept these modernist legacies, or non-inclusive HPP process itself. In all of the cases (including Söğütlüdere, in which the HPP was constructed), locals were against the non-inclusive operation of the HPP process. When local interviewees are listened to, it is understood that they wanted to meaningfully participate in HPP processes, as these might significantly impact on their lives. However, due to the modernist legacies embedded in the Turkish politics, a degree of meaningful participation has not been achieved within the official process. This occurs despite being an existing legal framework for it in the Turkish legislation, especially in the EIA by-laws. Instead, in the case studies, it was ensured through the locals' own attempts (see Hamsici, 2010 and EJOLT, 2015 for numerous similar cases in Turkey). This malfunction of the meaningful participation in the HPP processes can be concluded through Interviewee 11's explanation, where he criticised the entire HPP process and the administration's reluctance to include local people to the HPP processes, while underlining the will and role of the locals in the achievement of their meaningful participation:

> 'The official part of the story [referring to the state] does not have any effort to protect [people and the nature]. Everything is burdened to the people who will be affected by those projects. They become their own engineers, their own academics, their own peasant, their own farmer, their own protester and their own environmentalists.'

### 9.5 Recap of the Discussion in Turkish Context: How Can Environmental Justice Be Mainstreamed in Turkey's Water Policies?

At the time of writing, irrigation channels and dams, and brook rehabilitations and HPPs are still being constructed through Turkey's water management. For example, there are controversial inter-basin water transfers to provide drinking water to İstanbul from Melen Stream of Bolu, which is miles away from İstanbul (see Islar and Boda, 2014). In addition, the government initiated a plan, '1000 Ponds and Irrigation in 1000 Days' at the beginning of 2012, which aims to complete the transition to irrigated agriculture in rural Turkey, sponsored by DSİ (2015). Elsewhere, the construction of the large-scale Ilısu dam on Tigris River has led to fights between local communities, the state and creditors. Locals fear its potential impact on the socio-cultural heritage of the region, where the ancient town of Hasankeyf is envisaged to be flooded at the end of the process (İlhan, 2009). Furthermore, there are controversies regarding the private sector's involvement in the planning and development of urban water and waste water, which have been controversial in different

cities like Antalya and Kocaeli (see Çınar, 2009). Amid these controversies, DSİ has announced its intention to endorse basin-based water management (The Ministry of Forestry and Water Affairs, 2014), while the enactment of a National Water Law has also been debated at the national scale (Kibaroğlu, Sümer and Scheumann, 2012).

As discussed throughout this research, the concept of environmental justice and its patterns are implicit in Turkey's water policies, including its HPP process. For example, the Turkish state justifies controversial water policies, including HPPs, based on their contributions to overall socio-economic development and environmental sustainability, while patterns of environmental justice take place in discourses and legal frameworks. The official discourses related to HPP's contributions to local development could be perceived as a part of the improvement of justice in the distribution of socio-environmental vulnerabilities or recognition of remote localities. Moreover, although the relevant HPP legislation does not mention meaningful participation explicitly, it covers all four aspects of the concept. However, as understood from localised water management cases, including, but not limited to HPPs, the implementations of these policies create socio-environmental controversies, opposed to what has been officially targeted. The findings of this research suggest that water policies and relevant legal frameworks should be aligned with the patterns of environmental justice, and that their genuine implementation should be ensured for the sake of achieving socio-economic development and environmental sustainability objectives and preserving local socio-environmental dynamics (if these are the real intentions of the state). This alignment may be achieved, and the socio-environmental justice aspects of Turkey's water policies may be improved, through the following recommendations:

This research calls for the mainstreaming the concept of environmental justice in Turkey's water policies. Given that official discourses, legal frameworks and social reactions against water management practices (as shown through HPP in this research) imply the environmental justice patterns (existing ones and the ones formulated in this research), mainstreaming this concept and its patterns and establishing explicit links to them at the policy level would change the ways that water policies are planned and implemented in Turkey. This requires researchers working on environmental justice to engage in active communication with different segments of society to disseminate the concept among civil society, political parties, bureaucracy and industry. For example, once national NGOs, local

people and lawyers are informed about this concept, they may compile their concerns in their legal struggles opposing controversial projects like HPPs, which may lead to legal and institutional transformations at the national level. Thus, the first step should be mainstreaming environmental justice in Turkey, to have an effect on policy.

Moreover, legal transformations in Turkish water management (along with the environmental justice patterns) are needed to achieve socio-environmental justice at different scales. The implementation and improvement of existing legislation and improvement of them along with the patterns of environmental justice will inevitably lead to legal transformations. More radical transformations can take place along with European norms and values, considering Turkey's EU candidacy and its (albeit diminishing) influence on the country's domestic policies. For example, Turkey's EU candidacy required it to sign and ratify the Aarhus Convention, align its legislation with the Water Framework Directive and commit itself to environmental sustainability. Among these commitments, the potential ratification of the Aarhus Convention and the alignment of Turkey's water policies with the Water Framework Directive (and their genuine implementation at the national level) may be a window of opportunity in mainstreaming environmental justice, while also transforming legal frameworks and improving water policies. Considering the fact that the National Water Law is still in the draft process in Turkey, and the state has recently strategised to improve its water management with a basin management approach (to attain socio-economic and environmental sustainability, as officially stated), such a transformation at the legal level may be a realistic target once the concept has been successfully mainstreamed.

Furthermore, legal transformations are not sufficient in themselves to attain socio-environmental justice in Turkey's water management. Institutional changes in water management are desperately needed to diminish socio-environmental injustices. In this sense, the DSİ's structure and operations should be harmonised with the Aarhus Convention and the Water Framework Directive. As discussed throughout this research, and clearly indicated by the DSİ engineers interviewed for this research, the DSİ's planning and implementation of water policies is dominated by engineers. This leads to the understanding that water resources are simply considered as hydrological properties, as a result of which society and social structures are either considered very limitedly, without contextual peculiarities, or are completely disregarded (see Linton, 2010). Discussions with the DSİ engineers revealed that

the DSİ still refrains from hiring social scientists or undertaking social assessments prior to the implementations of its policies. The DSİ's institutional scope should be transformed cover the social dimensions of the water management practices by considering the contextual differences of the communities. This may be a good step towards addressing the socio-environmental controversies embedded in water policies. Such an institutional transformation may, for example, lead to the consideration of the local differences and vulnerabilities of local communities; overcome fundamental problems regarding the misrecognition of rurality; and pave the way for genuine public participation in water management. As indicated in the previous recommendation, this may be also attainable considering the recent changes in Turkey's water management, including the draft of National Water Law and basin management, if their scope is efficiently communicated. A strong political commitment is required in negotiating about their contents, however.

Finally, this research calls for the reconsideration of the prevailing conceptualisations and patterns of socio-economic development and environmental sustainability. As seen throughout this research, and similar examples faced globally and covered widely in the literature (see, for example, Martinez-Alier, 2002 and Peet and Hartwick, 2009), the dominant models of socio-economic development cause significant problems for the majority of the world's population while benefiting only a few. It has been well documented that neoliberal forms of socio-economic development, as well as environmental management, have led to socio-economic crises and numerous injustices. This is especially true in developing world, as shown when the impacts of neoliberalisation are brought into greater focus (see Castree et al, 2010). As documented in Heynen et al (2007), these models are justified for the sake of their contribution to environmental sustainability (see Goldman, 2006), but are also the main reasons for contemporary ecological crises. This HPP case implicitly demonstrated these deficiencies. To put it differently, Turkey is committed to socio-economic development via steady economic growth, assuming that this will improve social conditions and sustainability. As a result, the country is promoting large-scale renewable energy opportunities without undergoing adequate long-term socio-economic analyses, as shown in its HPP process demonstrated through this research. This highlighted that policies pursuing these models may contribute to economic development, however such a contribution is sometimes marginal considering the socio-environmental externalities of these projects. For example, the Saklıkent HPP would definitely produce electricity and

contribute to sustainable development goals of the country if it was completed. However, the benefits of this electricity would be marginal, while the project would jeopardise living spaces and livelihoods of local communities and damage the unique ecosystem of a national park. Therefore, along with the recently promoted de-growth literature, proposing modals to replace mainstream socio-economic development and environmental sustainability concepts with the ones nuancing local communities, cultural contexts and ecological integrity and promoting 'de-growth' than constant growth for socio-economic and environmental sustainability (see Kallis, Kerschner and Martinez-Alier, 2010; Kallis, 2011), Turkey's water management can be improved. It should be carefully noted here that it would be almost impossible to achieve such a fundamental change under the current socio-economic and political settlements. However, radical transformations in mindsets and conceptualisations would directly address the numerous socio-environmental injustices documented throughout this research, as attained by several opposition movements including but not limited to Saklıkent, Kargı-Yanıklar and Yuvarlakçay.

### 9.6 Broadening the Focus of the Environmental Justice and Highlighting Contributions to Literature: Modification of the Environmental Justice Frameworks for Developing Country Research

To this end, this research represents the first in-depth application of the concept of environmental justice in Turkey, despite the existence of other research implying environmental justice dimensions in Turkish politics (see Islar, 2012b and Özkaynak et al, 2015). This entire analysis highlighted that the socio-environmental inequalities revealed in Turkey's HPP process (depending on case studies) fit the majority of the patterns of environmental justice. While this provided a confirmation of the environmental justice concept, it also empirically enriched the concept through its applications to the Turkish case. In addition, this research's particular focus on Western Mediterranean Province is novel in Turkey's water studies, which tend to prioritise the highly controversial HPP cases from its Black Sea Province or feature GAP-related research or country-level analyses.

Although the existing environmental justice framework has shaped this research process, it eventually integrated rurality as a group difference for recognition in the environmental policy-making processes. This is mainly due to it being key to explaining socio-environmental injustices, and being the key 'group difference' shaping the environmental

justice claims of the affected communities in Turkey's HPP processes. In addition, this research showed that it is possible to integrate ecological justice notions into environmental justice analyses. Such a perspective supports the hybridity of nature and society by explicitly documenting how nature is disproportionately affected; it is neglected and its participation is not valued within the environmental policy-making processes. This emphasis strengthens the environmental justice claim, while offering a pattern which may be relevant in similar analysis. Furthermore, although this research employed a political ecology approach to reveal Turkey's water policies, it ultimately highlighted the key role of modernisation (and modernist ideology and agendas) in the formation of socio-environmental injustices. Despite its recognition in the field of political ecology literature, studies into environmental justice have hitherto not explained the roots of socio-environmental inequalities through the modernisation processes. This research accordingly demonstrated that modernisation itself can be assigned as an explanatory framework in environmental justice literature. These contributions can be seen in the following figures.


**Figure 9.2:** Conceptual framework of this research, based on Walker (2012) and Schlosberg (2004, 2007) modified as a result of this research. These modifications are capitalised in the figure.

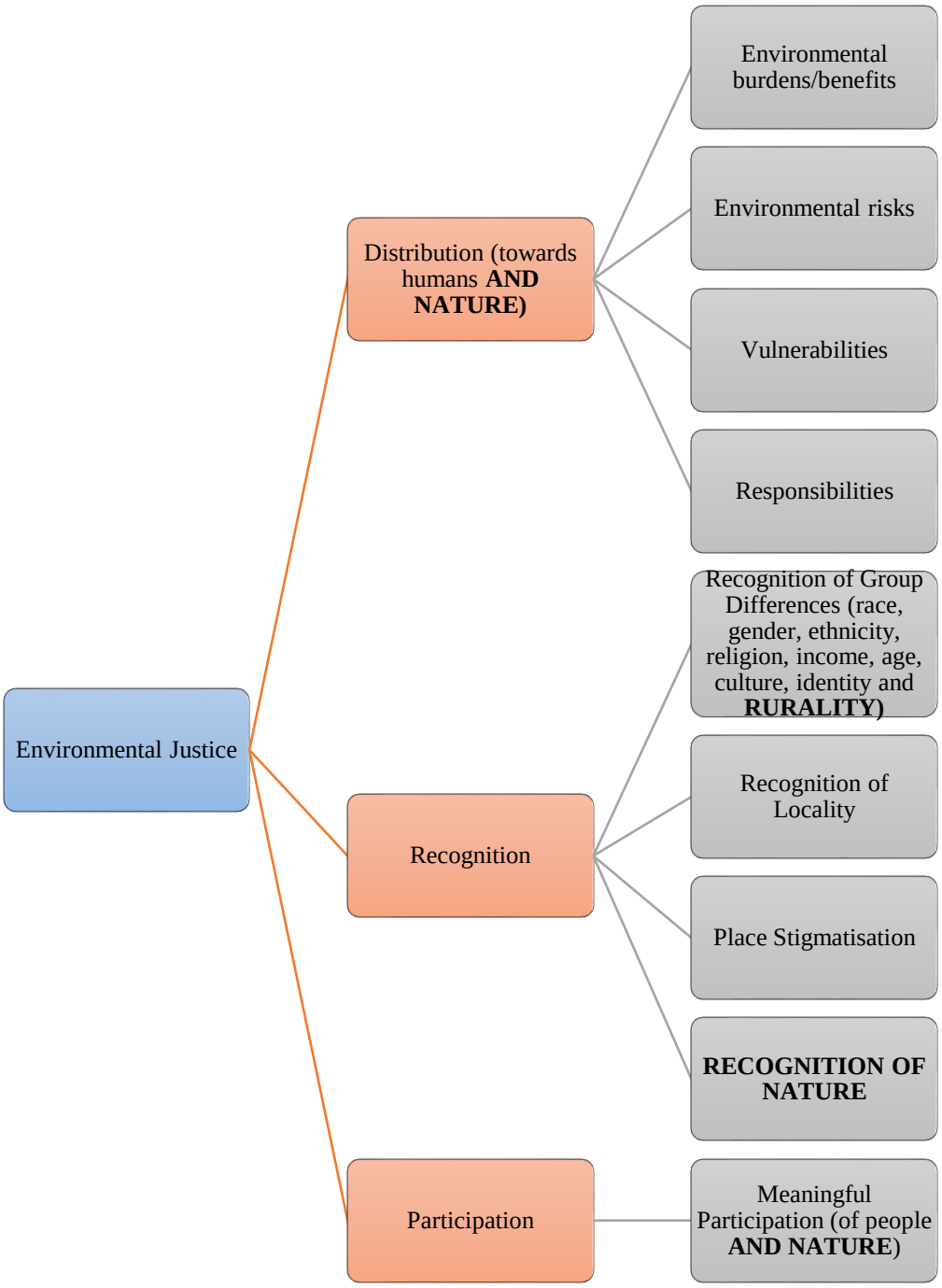


**Figure 9.3:** Patterns of Environmental Justice along with the environmental justice literature. Bold and capitalised terms were added and reaffirmed by this research.

Overall, this research customised the Western-centric environmental justice concept to a developing country. Figures 9.2 and 9.3 shown above imply that the concept of environmental justice needs to be modified to become more relevant to non-Western contexts. Although the concept still manages to reveal socio-environmental inequalities in developing countries as it stands, it fails to explain the major processes leading to these injustices, and it misses fundamental inequalities originating within environmental policy-making processes. As seen in this research, the overemphasis on modernisation ideology and agendas in production of socio-environmental transformations would shed more light on the formation of injustices than the other explanatory frameworks discussed earlier in this research, especially in the country contexts going through the modernisation processes. In addition, for the cases not necessarily involving racial, ethnic, religious and cultural differences (the majority of the environmental justice analyses), the introduction of the notion of rurality as a group difference (and its misrecognition) indicated that socio-environmental injustices might still exist. Moreover, the explicit integration of ecological justice into the environmental justice framework highlighted numerous injustices, which lead to more convincing environmental justice claims. This could be applicable in all contexts. Through the modifications introduced to the environmental justice concept through the case of Turkish HPPs, it could be claimed that environmental justice has become less Western-centric, and it has been modified to address more environmental injustices.

## 9.7 Summary

This chapter scaled up the HPP debate to a national level, then to broader levels. By doing so, it also sought for opportunities to extend the reach of existing environmental justice frameworks. It was shown that field results evoked additional patterns and explanatory frameworks for environmental justice analyses, which have not been sufficiently covered within the relevant literature. As a result of this chapter, four main conclusions can be drawn. Firstly, it was argued that the lack of recognition of group differences based on the notion of rurality has played a significant role in shaping Turkey's HPP process (and the associated socio-environmental transformations). This chapter asserted that the reason that rural communities have felt socio-environmental injustices more than the other segments of Turkish society was not only that rural areas were the natural destinations for HPP constructions. It was demonstrated that multiple processes and relationships experienced in

the contemporary Turkish history, including neoliberalisation, urbanisation and spread of extractive industries, have paved the way to the creation of HPPs and have implicitly misrecognised rural communities and the notion of rurality. When presenting the field results, this fundamental misrecognition was implied. This misrecognition is embedded in Turkey's policy processes, including HPP, and is among the key socio-environmental injustices experienced in the HPP process. Thus, this discussion made it clear that integrating recognition of rurality as a separate pattern of environmental justice would reveal different and highly relevant set of social structures and power relations in Turkey's HPP process.

Secondly, this chapter argued that the lack of recognition of rural communities (and the notion of rurality) explains the socio-environmental injustices revealed through the patterns of distributive environmental justice. Accordingly, it was shown that this misrecognition lies at the centre of the distribution of responsibilities across Turkish society in the HPP process. The needs of urban life, consumption patterns and industry have been prioritised, while the needs of rural communities and features associated with rurality have been subordinated in the HPP process. Based on this, it was argued that rural communities bear the burdens of HPPs, even though they (with the patterns of rurality) are not the main motivations leading to their emergence. Urban communities, however, enjoy their benefits, which support urban consumption patterns and lifestyles.

Thirdly, this chapter demonstrated that Turkey's modernisation process and the ideology of modernisation can be used as an explanatory framework to reveal the socio-environmental injustices experienced in the HPP process. Turkish politics incorporates modernist legacies in Turkish politics such as the promotion of technocracy, the taming of the nature, overemphasis on socio-economic development, rationality and the discouragement of 'traditional' at the expense of 'modern'. These legacies have shaped the HPP policies, while reflecting the roots of the current socio-environmental inequalities bound to them. For example, it was clearly shown that local communities widely complain about non-participatory HPP processes (see Chapter 8). However, when the HPP process is deconstructed at the national level, it is seen that the modernist legacies embedded in Turkey's HPP process are the main reasons that HPP policies are shaped in a non-inclusive way. These legacies can also be discussed as the fundamental motivations causing socially and environmentally unjust HPP implementations. Eventually, it was implied that the

examination of these modernist legacies within Turkey's HPP process reveals the roots of the socio-environmental injustices when the analysis is confined to the existing environmental justice framework, as well as along with the additional patterns unearthed in this chapter. While these three conclusions addressed the research gaps identified in Chapter 3, this chapter also, finally, drew conclusions on the possibilities of how the concept of environmental justice can be integrated into Turkey's water management.

In this sense, it was highlighted that the existing environmental justice framework can be used to analyse and discuss Turkey's HPP process and documents socio-environmental inequalities, as demonstrated in the previous chapters. It was essentially concluded that the application of modernisation as an explanatory framework and the consideration of the recognition of rurality as a separate pattern of environmental justice are more relevant to Turkey's HPP process than the existing environmental justice frameworks (see Figures 9.2 and 9.3). It was argued that such a modification of the concept of environmental justice, informed through the Turkey's HPP cases, would also be more relevant to the similar analyses undertaken in developing country contexts. Although the findings of the Turkish HPP cases may remain context-specific, the overall conclusions of this research (promotion of an explicit integration of the notions of ecological justice to the empirical environmental justice analyses, integration of modernisation as an explanatory framework of process analysis in environmental justice studies and, most importantly, explicit integration of the notion of rurality as a group difference) can be more relevant to the environmental justice cases in the developing world than the existing frameworks of environmental justice.

# CHAPTER 10: CONCLUSION

## 10.1 Introduction

This research has undertaken to examine the making of claims in environmental justice based on Turkey's HPP development phase of its water politics. Elaborating the environmental justice framework with a range of qualitative methods, this research provides significant contributions to the literature on environmental justice and Turkish (environmental/water) politics. These contributions focus in part on the practical aspects, which includes the fact that this work is the first ever in-depth environmental justice analysis of Turkey, as well as the first comprehensive elaboration of hydro-constructions' environmental justice dimensions. However, this work is not limited to the practical, but it also enriches the existing environmental justice framework by adding possible factors of analysis, which can be pertinent in the non-Western contexts.

Along with the conceptual framework of making environmental justice claims, Chapter 3 has articulated the 'ideal environmental justice', in other words, how environmental justice ought to be. Chapter 5 has focussed on 'the processes' by deconstructing the history of Turkey's water policies to show how current socio-environmental inequalities bound to HPPs are conceived. That analysis has been infused with political ecology perspectives, enabling a multifaceted account of Turkey's water policies shaped by the interactions between multiple socio-natural processes and relations. Chapters 6, 7 and 8 have provided evidences for different dimensions of environmental justice, for respectively distributive, for recognitional and for participative (procedural) ones. This evidence has been based on four HPP cases from the Western Mediterranean Province of Turkey. Those three chapters have substantiated justice aspects and equipped this research empirically. Chapter 9 has connected all the chapters to each other and articulated the environmental justice claim of this research. That chapter has scaled up the environmental justice claim by discussing the results of this analysis on the national scale. This chapter presents the main conclusions drawn from this research and creates a guide for the further research.

Following elaborations of frequently-used concepts in this research, there was an overview of environmental justice, political ecology and modernisation (as an ideology and as a political agenda of Turkey), as well as making environmental justice claims framework

consisting of ‘justice’, ‘process’ and ‘evidence’ as components of a well-equipped environmental justice claim. In explaining its justice component regarding environmental justice as distribution, recognition and participation, the framework of presentation of the field data were also articulated. In line with those detailed overviews, four research gaps were identified as needing to be addressed in this research:

- The Western-centric stance of the concept of environmental justice and its inadequacy in grasping socio-environmental inequalities in non-Western contexts;
- Human-centricity of the environmental justice analyses;
- Limited application of the environmental justice concept in interpreting Turkey’s environmental/water politics despite its high relevance;
- Limited reference in environmental justice literature to modernisation processes in explaining deep causes of socio-environmental inequalities.

To respond these research gaps, the main research question was posed to make an environmental justice claim on Turkey’s recent small-scale HPP development policies:

- *To what extent do the existing conceptual frameworks of environmental justice reveal and explain socio-environmental (in)equalities in Turkey’s recent HPP policies and implementations?*

Three sub-questions were framed to complement the main research question and guide the empirical analysis:

- *Can Turkey’s modernisation process explain the roots of current socio-environmental (in)equalities occurred in Turkey’s HPP process?*
- *What are the socio-environmental impacts of HPPs in Turkey?*
- *How can the relevance of the environmental justice concept be increased in non-Western contexts?*

This research then explicitly sought answers for those questions while still reflecting back on the main research question. Substantiation of the conceptual framework was depended on data obtained through qualitative methodology, which provided the empirical aspects of the research. The methods include document analysis, discourse analysis, mass media/social media analysis, interviews, group interviews and observation. All of these methods allowed for the operationalization of the concepts. Furthermore, the HPP cases of Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay and the features of those areas were presented briefly with the justifications of the selection of them, including: the region's uniqueness as sensitive ecosystems; the region's under-representation in academic analyses (compared to Black Sea Province); the completed nature of HPP processes in those areas and the variety of public reactions within a limited area (enabling a better opportunity to understand the entire processes compared to ongoing cases where socio-political stability may hinder the quality of research); and other socio-cultural and logistic factors. Depending on those HPP cases, public reactions for and against HPPs were deconstructed to empirically reveal socio-environmental aspects of HPPs which were grouped into distributive, recognitional and participative (procedural) environmental justice. The rest of this chapter wraps up the main conclusions drawn from this research and directs for the policy implications and research recommendations.

## 10.2 Summary of the Research

Subsequent to this analysis, the process of production of socio-environmental transformations bound to HPPs was shown by using four case studies from the Western Mediterranean Province. Accordingly, the first dimension of environmental justice, distributive environmental justice, was used to investigate socio-environmental (in)equalities in the case study areas, within the patterns proposed in the literature. Public reactions against HPP constructions (consent or opposition) in Saklıkent, Söğütlüdere, Kargı-Yanıklar and Yuvarlakçay were further deconstructed to understand how environmental benefits/burdens/risks were distributed across the society; HPPs led to proportionate distribution of vulnerabilities; and who the winners and losers of the HPP processes (distribution of responsibilities) were.

For the first pattern (***distribution of environmental burdens/benefits/risks***), the locals frequently referred to the environmental risks they would encounter at Saklıkent, Kargı-

Yanıklar and Yuvarlakçay cases. They raised issues such as environmental degradation, excavations, the deterioration of scenery nature, deforestation, loss of agricultural lands and changes in the amount of water as the potential problems that they would be burdened with in the case of HPP constructions. The Söğütlüdere case was different since locals were attracted to the potential job opportunities and financial assistance offered by the company, leading to the eventual HPP construction, while the environmental aspects of the HPPs were not discussed much.

It became apparent that certain ***vulnerabilities*** of locals (like over-dependence on water in livelihoods and social life and their limited socio-economic opportunities) would be deepened through the HPPs in Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases. In other words, although these villages have relatively good socio-economic and environmental opportunities, providing them socio-economic advantages (compared to Söğütlüdere case), they still depend on water. If the water were disturbed as a result of (potential) HPP constructions, this would make these communities worse-off. In the Söğütlüdere case, the local's existing vulnerabilities and relatively worse-off socio-economic and environmental conditions pushed them to consent to the HPP, since they believed their vulnerabilities would not get worse than their current conditions if they managed to secure the financial assistance to address them.

Moreover, the locals interviewed in Saklıkent, Kargı-Yanıklar and Yuvarlakçay villages had clear visions of the ***winners and losers*** in their HPP processes. They unanimously named themselves as the (potential) losers, while explicitly asserting that it would be the state and company who would profit from HPP constructions. They referred to the water use rights agreements which would deprive of access to water sources for 49 years and influence water allocation, while enabling the company and state to profit from the electricity generation. The data from the Söğütlüdere case did not disclose such strong views on this pattern, although interviewees complained about their general negligence in the different political processes.

In addition to that, it appears that these patterns can also be analysed through the ecological aspects. Firstly, the nature would be affected through these HPPs, meaning that burdens/risks would be put disproportionately on nature. Secondly, the cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay clearly demonstrated that sensitive ecosystems would be damaged, which would underline the problems regarding the disproportionate distribution of vulnerabilities

towards nature. For instance, Saklıkent as a national park, Kargı-Yanıklar as the reproduction corridor of *Liquidambar orientalis*, and Yuvarlakçay as a part of Special Environment Protection Area are all sensitive ecosystems. Even minor changes would lead to irreversible impacts in these areas. In other words, these vulnerable ecosystems would be destroyed if HPPs were constructed. Thirdly, relevant to these points, it could be claimed that nature would be the absolute loser of a (proposed) HPP construction, since their main aim is to support humans' needs (electricity and economic development).

This deconstruction of HPP processes in the case study areas suggested that the distribution of environmental burdens/benefits/risks, vulnerabilities and responsibilities were not just (when they are analysed within the context of distributive environmental justice), especially in the cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay. The Söğütlüdere case, on the other hand, represents an indifferent case, where there is not sufficient data is to determine whether it is unjust, or whether the HPP will definitely correct the existing inequalities in the village.

The 'evidence' component of making environmental justice claims revealed the socio-environmental (in)equalities bound to HPP processes in the case study areas, within the context of recognitional environmental justice. As specified throughout this research, the scope of HPP policies covers the entire country, regardless of racial, ethnic, religious, gender, age and income ***differences***. This prevents the study of intentional negligence of those group differences in the HPP process. In addition, locals of case study areas represent 'the majority' of the Turkish society, and the scope of the HPP policies do not target the other groups listed here. For this reason, issues regarding place stigmatisation, the recognition of locality and the recognition of nature emerged as the main patterns of this dimension as a result of deconstruction of public reactions (the analysis was kept within the limits of the existing literature).

***Place stigmatisation*** investigated how senses of a place can be considered as the subject of justice, which also raises the issue of place attachments. Given that HPPs themselves can be regarded as stigmatising technologies, the Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases demonstrated that the positivities (socio-economic and environmental) associated with these places might be removed by the HPP constructions. The way that the locals viewed the HPP processes and described their localities clearly showed how they are attached to their

localities, and the negligence of this attachment and positivities can also be implied as injustice. Although the Söğütlüdere case represents the opposite scenario, where locals seemed less attached and they constantly complained about their existing negatives, these negative senses were among the key reasons that they consented for the HPP construction. That is to say, the existing negative senses of the Söğütlüdere villages and the relatively lower level of place attachments helped the company to convince the locals to allow the HPP construction. In the end, the negligence of these senses associated with a place, and the likely consequences that may alter these senses in negative way due to HPP construction, can be indicated as socio-environmental inequalities, when analysed within the context of recognitional environmental justice.

***Local*** communities were not adequately informed and consulted during the HPP processes, indicating a clear failure of recognition. This issue was detailed in analysing participative (procedural) environmental justice, while this failure was explained only within the context of the recognition of localities for this component of environmental justice. In addition to the local communities in all the case study areas, local administrators, experts and professionals were also not included in the HPP processes. No municipalities, *mukhtars*, local NGOs or local businesses were consulted during the planning and implementation of HPPs, even though their expertise in these areas and their knowledge of the socio-environmental dynamics of these localities would have positively contributed to the HPP processes. Furthermore, the proposed HPPs in Saklıkent, Kargı-Yanıklar and Yuvarlakçay demonstrated that the ***nature's peculiarities, complexities, needs and interests*** were neglected in the HPP processes, given the classification of these basins as sensitive ecosystems conserved under different schemes.

In summary, analysis of recognitional environmental justice revealed that HPPs would have had stigmatising impacts, and that they neglected the place attachments of the local communities. In addition, regional peculiarities were completely disregarded, as shown when local professionals/ administrators/experts were not included in the HPP processes. Moreover, the ecological peculiarities and the different needs and interests of nature were neglected in all of the case study areas except Söğütlüdere, since this pattern is not applicable there. Overall, it appears that the existing framework of recognitional environmental justice

emphasises socio-environmental inequalities from a different perspective for the HPP cases of the Western Mediterranean Province.

The dimension of environmental justice as participation (or procedural environmental justice) was used to analyse further socio-environmental (in)equalities in analysing HPP cases. In line with the conceptual framework, the HPP processes of four case study areas were deconstructed in the context of ***meaningful participation***. This mainly revealed that local communities and nature were not considered or included in HPP processes. Locals were either completely disregarded or deliberately avoided in those processes (especially in the Yuvarlakçay case, but also in the Kargı-Yanıklar case) or their participation was limited to (flawed) EIA processes as seen in the Saklıkent case. The Söğütlüdere case presented a mixed portrayal; the company conducted a voluntary public participation meeting (despite the company's exemption from the EIA process), however its operation also reflected a series of problems.

The analysis showed that locals' and nature's concerns, needs and interests were not represented in those HPP processes. The Saklıkent, Kargı-Yanıklar and Yuvarlakçay cases evolved into public oppositions against the proposed constructions, where locals voiced their stances and demanded representation. The Söğütlüdere case limitedly achieved a degree of representation, since attempts were made to negotiate with locals' and mitigate their concerns through financial aid. In accordance with this, the locals' ability to influence the process was not due to an inclusive HPP process, but rather because of their own determination to pursue opposition movements and legal cases. For this element, the Söğütlüdere case can be put in a similar category, since negotiations and public participation occurred not due to the HPP process or locals' demands, but through the company's overarching objective to complete its international certification program to trade the hydroelectricity produced through this HPP (which happened to allow local communities to air their concerns regarding the process).

All of these cases also demonstrated that state institutions did not put any significant effort into including locals and nature in the HPP processes. State institutions remained ineffective or indifferent in the Saklıkent and Söğütlüdere cases; they neither promoted participatory mechanisms nor did they prevent people from expressing their support/opposition. When it comes to the Kargı-Yanıklar, and particularly the Yuvarlakçay cases, it appeared that the state deliberately acted to avoid locals' oppositions by pressuring them. For example, the

implementation of court decisions stopping the HPP construction in Kargı-Yanıklar were delayed by state institutions. In addition, state institutions targeted locals opposing to the HPP construction personally in Yuvarlakçay. Furthermore, as seen in the operation of these processes in sensitive ecosystems and protected areas, the state's particular effort in maintaining the natural conservation of these areas was non-existent. All of these cases showed that the state did not particularly encourage public participation, in fact, it tried to deter it, and it openly favoured companies at the expense of locals in the cases of Saklıkent, Kargı-Yanıklar and Yuvarlakçay.

Such deconstructions of the HPP processes at the case study areas clearly showed that the elements of meaningful participation of locals and nature were not fully ensured, despite their existence in the legal framework of HPPs and environmental conservation. Public reactions against these HPPs in Western Mediterranean Province revealed the four elements of meaningful participation corresponded with people's normative understanding of justice, since their complaints/narratives explicitly referred to them, as well as the legal framework of the HPPs. Through on this analysis, these HPP processes are associated with numerous socio-environmental injustices when they are analysed within the context of participative (procedural) environmental justice.

In line with the documentation of Turkey's HPP policies, along with the making environmental justice claims framework, the environmental justice claim can be scaled up towards the national level. It was argued that this scaling-up process also questions the adequacy of the existing environmental justice framework in analysing Turkey's HPP policies. It was argued that recognitional dimensions of environmental justice in particular are not able to account for the fundamental local socio-environmental inequalities experienced in Turkey's HPP processes. The locals in the case study areas, relevant academic works on Turkey's HPPs and the literature on Turkey's modernisation process all explicitly stated that rural communities and the notion of rurality are traditionally disregarded in Turkish politics. This research argued that the subordination of rural communities and the notion of rurality are among the main reasons leading to the spread of HPPs in Turkey. Fundamental reforms and policy shifts in Turkey's republican history have inherently misrecognised the socio-economic, cultural and spatial peculiarities, needs and interests of rural communities and rurality. This misrecognition was clearly seen in Turkey's HPP

process. In addition, the socio-environmental inequalities (of the HPP processes) revealed through the affected communities' narratives are based on the fact that the notion of rurality is ignored in these processes. Accordingly, rurality has to be integrated into the environmental justice framework, especially into its recognitional dimension, as a group difference. Although the negligence of rural communities and idea of rurality are implied in the environmental justice literature, it has not been articulated as a particular group difference, which means studies fail to address more fundamental socio-environmental injustices in environmental policy-making processes.

Moreover, this assertion of the recognition of the notion of rurality was further elaborated by discussing it within the distributive environmental justice. This revealed that the emphasis on urban politics, urban lifestyles and urbanisation (at the expense of rural politics and rurality) has deepened the vulnerabilities of rural communities, and has burdened them with disproportionate socio-environmental problems. When explained through the pattern of the distribution of responsibilities, it became clear that HPPs fundamentally aim to meet the needs of urban communities, consumption patterns and urbanisation processes, while the socio-economic and environmental problems bound to HPPs are directed towards rural communities and the idea of rurality. This stress on urbanisation and urban politics was also explained through Turkey's modernisation process.

Finally, the socio-environmental inequalities documented through meaningful participation were explained through the operation of the general HPP process of Turkey. The centralised, top-down and technocratic nature of HPP policies are the main reasons hinder meaningful participation and cause numerous socio-environmental inequalities at different Turkish HPP sites. It was also argued that the general HPP process of Turkey was justified based on modernist legacies of developmentalism, rationality and the superiority of science and technology. These legacies inherently discourage public participation and nature's conservation (at the expense of achieving the modernist goals of economic development and social progress).

These findings, therefore, have led to the modification of environmental justice framework in a way which can be more relevant to developing country contexts, while scaling this research up to a broader level. They simply call for a broader thinking of the concept of environmental justice in its real-life implications. That is to say, the environmental justice

concept, which traditionally focusses on the socio-environmental injustices faced by groups characterised by racial, ethnic, religious, income-level and gender differences and tends to explain socio-environmental inequalities with institutional racism and neoliberalism in general. However, as the Turkish HPP cases demonstrated, these notions may be relevant in explaining environmental injustices, but fail to grasp the essence of the analysis. Accordingly, it was argued that environmental justice analyses explaining socio-environmental inequalities based on the modernisation processes, focussing more on the group differences based on the notion of rurality in environmental policy-making processes and equally prioritising the notions of ecological justice in empirical analyses, would lead to more meaningful environmental justice analyses. This would take the concept beyond its Western-centricity, while they can also deepen the environmental justice analyses in the Western context.

### 10.3 Further Research Recommendations

These analyses have highlighted further areas of research. This research calls for more research of environmental justice into developing countries, revealing the relationships between modernisation processes and socio-environmental inequalities. As shown throughout this research, the application of modernisation as an explanatory framework can reveal socio-environmental inequalities and explain on environmental justice in a more relevant way. This approach also opens doors for more contextual discussions on the issues of environmental justice. Considering that modernisation is an inevitable process for the majority of developing countries, and that environmental justice analyses have gained momentum with the expansion of the concept in the developing world, further analyses should attempt to formulate their arguments around the modernisation processes to establish strong links between modernisation and socio-environmental justice. This may better illuminate the roots of socio-environmental problems and create policy responses to address them.

In addition, this research calls for more empirical studies on Turkey's HPP process, to further understand the justice aspects embedded in it. For example, this research discovered that urbanisation policies and processes are strongly relevant in the implementation of controversial environmental projects and their socio-environmental impacts. It argued that the widespread application of HPPs in the rural areas can be interpreted as a part of

urbanisation policies. Although the literature on urban political ecology theoretically informs this relationship (see, for example, Heynen, Kaika and Swyngedouw, 2006), Turkey's urbanisation process has not been correlated with its water policies. Investigating this correlation would illuminate the different aspects of socio-environmental justice. Regardless of the theoretical/conceptual lenses to be applied, more social research into Turkey's HPPs could reinforce the country's concept of environmental justice; the HPPs outside the Black Sea Province should be targeted in particular (since these dominate the existing HPP literature and journalistic research).

Finally, HPPs have been justified by the Turkish state due to their contribution to sustainability/sustainable development, and they have been the pillars of neoliberal transformations in Turkey. Therefore, it can be beneficial to investigate them within sustainable development/sustainability. In this sense, the HPP processes can be deconstructed within the context of transformative pathways for sustainability, through which competing discourses can be unearthed (see Scoones, Leach and Newell, 2015 for the transformative pathways). Such a deconstruction can essentially disclose the similar socio-environmental justice aspects, while also empowering transformations literature by using environmental justice as a focal point, which is indicated as one of the weak points of the literature (see Scoones, Leach and Newell, 2015). As one of the most policy-relevant literatures on environmental governance, this endorsement may contribute to popularise the environmental justice concept at the global level and environmental justice patterns may be reflected at the policy level.

**REFERENCE LIST**

Abbasi, T. and Abbasi, S. A. (2011) Small hydro and the environmental implications of its extensive utilization. *Renewable and Sustainable Energy Reviews,* 15**,** 2134-2143

Adaman, F., Akbulut, B. and Arsel, M. (forthcoming) Türkiye'de Kalkınmacılığı Yeniden Okumak: HES'ler ve Dönüşen Devlet-Toplum-Doğa İlişkileri [Re-reading Turkey's Developmentalism: Hydro-Power Plants and Changing State-Society-Environment Relationships]. In Evren, E., Erensu, S. and Aksu, C. (Eds.) *Sudan Sebepler: Kalkınma ve Çevrecilik Kıskacında Hidro-Enerji ve HES Karşıtı Mücadelenin Ekoloji Politiği [Hydro-power between Development and Environmentalism and the Political Ecology of the Struggles against Hydro-Power Plants]*. İstanbul: İletişim.

Adaman, F., Akbulut, B. and Madra, Y. M. (2015) 'Büyümeyi değil planlı ekonomik küçülmeyi konuşalım' ['Let's talk about planned de-growth instead of talking about economic growth']. In Oktay, S. (Ed.) İstanbul, Business HT.

Adaman, F. and Arsel, M. (2005) Introduction. In Adaman, F. and Arsel, M. (Eds.) *Environmentalism in Turkey: Between Democracy and Development?* Aldershot, England: Ashgate Publishing Company.

Adaman, F. and Arsel, M. (2010) Globalization, Development, and Environmental Policies in Turkey. In Cetin, T. and Yılmaz, F. (Eds.) *Understanding the Process of Economic Change in Turkey.* New York: Nova Science Publishers, Inc.

Adhau, S. P., Moharil, R. M. and Adhau, P. G. (2012) Mini-hydro power generation on existing irrigation projects: Case study of Indian sites. *Renewable and Sustainable Energy Reviews,* 16**,** 4785-4795

Agyeman, J. (1990) Black People in a White Landscape: Social and Environmental Justice. *Built Environment,* 16**,** 232-236

Agyeman, J. (2002) Constructing Environmental (in)Justice: Transatlantic Tales. *Environmental Politics,* 11**,** 31-53

Agyeman, J. and Carmin, J. (2011) Introduction: Environmental Injustice Beyond Borders. In Agyeman, J. and Carmin, J. (Eds.) *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices.* Cambridge, Massachusetts and London, England: The MIT Press.

Agyeman, J. and Evans, B. (2004) 'Just Sustainability': The Emerging Discourse of Environmental Justice in Britain. *The Geographical Journal,* 170**,** 155-164

Ahaber. (2014) *Basbakan Erdoğan: Türkiye artık eski Türkiye değil [PM Erdoğan: Turkey is no longer the old Turkey]* [Online] Available from: http://www.ahaber.com.tr/Gundem/2014/06/20/basbakan-Erdoğan-turkiye-artik-eski-turkiye-degil [Accessed: 25 July 2014]

Ahmad, S. and Tahar, R. M. (2014) Selection of renewable energy sources for sustainable development of electricity generation system using analytic hierarchy process: A case of Malaysia. *Renewable Energy,* 63**,** 458-466

Akar, H. (2010) Challenges for schools in communities with internal migration flows: evidence from Turkey. *International Journal of Educational Development,* 30**,** 263-276

Akbulut, B. (2011) *State Hegemony and Sustainable Development: A Political Economy Analysis of Two Local Experiences in Turkey*. Unpublished PhD Thesis. University of Massachusetts Amherst.

Akbulut, B. and Adaman, F. (2013) *The unbearable appeal of modernization: The fetish of growth. Perspectives: Political Analysis and Commentary from Turkey*. [Online] Available from: http://tr.boell.org/de/2014/06/16/unbearable-appeal-modernization-fetish-growth-publikationen [Accessed: 17 July 2014]

Aksungur, M., Ak, O. and Ozdemir, A. (2011) Nehir Tipi Hidroelektrik Santrallerinin Sucul Ekosisteme Etkisi: Trabzon Ornegi [The effect on aquatic ecosystems of river type hydroelectric power plants: the case of Trabzon-Turkey]. *Journal of FisheriesSciences.com,* 5**,** 79-92

Alatout, S. (2008) 'States' of scarcity:? water, space, and identity politics in Israel, 1948-59. *Environment and Planning D: Society and Space,* 26**,** 959-982

Alkon, A. H. (2013) The Socio-Nature of Local Organic Food. *Antipode,* 45**,** 663-680

Altınbilek, D. (2002) The Role of Dams in Development. *International Journal of Water Resources Development,* 18**,** 9-24

Anderson, D., Moggridge, H., Warren, P. and Shucksmith, J. (2014) The impacts of 'run-of-river' hydropower on the physical and ecological condition of rivers. *Water and Environment Journal***,** 1-9

Anderson, E. S. (1999) What Is the Point of Equality? *Ethics,* 109**,** 287-337

Angrosino, M. V. (2005) Recontextualizing observation: Ethnography, pedagogy, and the prospects for a progressive political agenda. In Denzin, N. K. and Lincoln, Y. S. (Eds.) *The SAGE handbook of qualitative research.* 3rd ed. Thousand Oaks: Sage Publications.

Anguelovski, I. (2013) Beyond a Livable and Green Neighborhood: Asserting Control, Sovereignty and Transgression in the Casc Antic of Barcelona. *International Journal of Urban and Regional Research,* 37**,** 1012-1024

Anguelovski, I. (2014) *Neighbourhood as Refuge: Community Reconstruction, Place Remaking, and Environmental Justice in the City,* Cambridge, Massachusetts and London, England: The MIT Press.

Anthony, C. (2005) The Environmental Justice Movement: An Activist's Perspective. In Pellow, D. N. and Brulle, R. J. (Eds.) *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement.* Cambridge, Massachusetts and London, England: The MIT Press.

Arsel, M. (2005) Reflexive Developmentalism? Toward an Environmental Critique of Modernization. In Adaman, F. & Arsel, M. (Eds.) *Environmentalism in Turkey: Between Democracy and Development?* Aldershot, England: Ashgate Publishing Company.

Atak, E. and Öztok, D.(2013) *10 Soruda Hidroelektrik Santraller [Hydroelectric Power Plants in 10 Questions]*. WWF-Turkey.

Atmış, E., Günsen, H. B., Lise, B. B. and Lise, W. (2009) Factors affecting forest cooperative's participation in forestry in Turkey. *Forest Policy and Economics,* 11**,** 102-108

Bağcı, H. (2001) *Türk Dış Politikasında 1950'li Yıllar* [Turkish Foreign Policy in the 1950s]. Ankara: ODTÜ Yayıncılık.

Baker, L. A. (2013) Hegemonic concepts and water governance from a scientific-engineering perspective. In Harris, L. M., Goldin, Jacqueline A. and Sneddon, C. (Eds.) *Contemporary Water Governance in the Global South: Scarcity, marketization and participation.* Oxford: Earthscan.

Bakış, R. and Demirbaş, A. (2004) Sustainable Development of Small Hydropower Plants (SHPs). *Energy Sources,* 26**,** 1105-1118

Bakker, K. (2010) The limits of 'neoliberal natures': Debating green neoliberalism. *Progress in Human Geography,* 34**,** 715-735

Bakker, K. and Bridge, G. (2006) Material worlds? Resource geographies and the 'matter of nature'. *Progress in Human Geography,* 30**,** 5-27

Balaban, O. (2012) The negative effects of construction boom on urban planning and environment in Turkey: Unraveling the role of the public sector. *Habitat International,* 36**,** 26-35

Balık, S., Ustaoğlu, M. R., Sarı, H. M., İlhan, A. and Topkara, E. T. (2005) Yuvarlakçay (Köyceğiz, Muğla)'in Balık Faunası [Fish fauna of Yuvarlakçay (Köyceğiz-Muğla)]. *E.U. Journal of Fisheries & Aquatic Sciences,* 22**,** 221-223

Barbour, R. S. (2014) *Introducing qualitative research: a student's guide,* Los Angeles and London: SAGE.

Barış, K. and Küçükali, S. (2012) Availability of renewable energy sources in Turkey: Current situation, potential, government policies and the EU perspective. *Energy Policy,* 42**,** 377-391

Bashkar, R. (1989) *Reclaiming reality: a critical introduction to contemporary philosophy,* London and New York: Verso.

Başkan, A. (2011) Liberalization of Turkey's Hydroelectricity Sector. In Kibaroğlu, A., Scheumann, W. and Kramer, A. (Eds.) *Turkey's Water Policy: National Frameworks and International Cooperation.* Berlin, Heidelberg: Springer-Verlag.

Başkaya, S., Başkaya, E. and Sarı, A. (2011) The principal negative environmental impacts of small hydropower plants in Turkey. *African Journal of Agricultural Research,* 6**,** 3284-3290

Baxter, B. (2005) *A Theory of Ecological Justice.* London and New York: Routledge.

Bayazıt, M. and Avcı, I. (1997) Water Resources of Turkey: Potential, Planning, Development and Management. *International Journal of Water Resources Development,* 13**,** 443-452

Bebbington, A., Bebbington, D. H., Bury, J., Lingan, J., Munoz, J. P. and Scurrah, M. (2008) Mining and Social Movements: Struggles Over Livelihood and Rural Territorial Development in the Andes. *World Development,* 36**,** 2888-2905

Beck, U. (1992) *Risk Society.* London: Sage Publications.

Beck, U. (1997) *The Reinvention of Politics: Rethinking Modernity in the Global Social Order.* Cambridge, UK: Polity Press.

Beckerman, W. (1999) Sustainable Development and Our Obligations to Future Generations. In Dobson, A. (Ed.) *Fairness and Futurity: Essays on Environmental Sustainability.* New York: Oxford University Press.

Been, V. (1993) What's Fairness Got to Do with It? Environmental Justice and the Siting of Locally Undesirable Land Uses. *Cornell Law Review,* 78**,** 1001-1383

Been, V. (1994) Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics? *The Yale Law Journal,* 103**,** 1383-1422

Bell, D. R. (2006) Political Liberalism and Ecological Justice. *Analyse & Kritik,* 28**,** 206-222

Berger, A. A. (1997) *Narratives: in Popular Culture, Media and Everyday Life.* Thousand Oaks, California: SAGE Publications Inc.

Berkey, H. J. and Taspinar, O. (2006) Turkey: On Europe's Verge? In Rohan, K. M. (Ed.) *Great Decisions: 2006 Edition.* Foreign Policy Association.

Bickerstaff, K., Bulkeley, H. and Painter, J. (2009) Justice, Nature and the City. *International Journal of Urban and Regional Research,* 33**,** 591-600

Blaikie, P. (2001) Social Nature and Environmental Policy in the South: Views from Verandah and Veld. In Braun, B. and Castree, N. (Eds.) *Social Nature: Theory, Practice and Politics.* Oxford: Blackwell.

Blaikie, P. (2012) Should some political ecology be useful? The Inaugural Lecture for the Cultural and Political Ecology Specialty Group, Annual Meeting of the Association of American Geographers. *Geoforum,* 43**,** 231-239

Blaikie, P. and Brookfield, H. C. (1987) *Land degradation and society.* London and New York: Methuen.

Bohman, J. (2007) Beyond Distributive Justice and Struggles for Recognition: Freedom, Democracy, and Critical Theory. *European Journal of Political Theory,* 6**,** 267-276

Bohman, J. and Rehg, W. (Eds.) (1997) *Deliberative democracy: essays on reason and politics.* Cambridge, Massachussetts: The MIT Press.

Bolin, B. (2007) Race, Class, Ethnicity, and Disaster Vulnerability. In Rodriguez, H., Quarantelli, E. L. and Dynes, R. R. (Eds.) *Handbook of Disaster Research.* New York: Springer.

Bond, P. (2000) Economic growth, ecological modernization or environmental justice? Conflicting discourses in post-apartheid South Africa. *Capitalism Nature Socialism,* 11**,** 33-61

Boone, C. G., Buckley, G. L., Grove, J. M. and Sister, C. (2009) Parks and People: An Environmental Justice Inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers,* 99**,** 767-787

Boratav, K. (2012) *Turkiye İktisat Tarihi: 1908-2009 [Economic History of Turkey: 1908-2009]*. Ankara: İmge Kitabevi.

Boratav, K., Türel, O. and Yeldan, E. (1996) Dilemmas of Structural Adjustment and Environmental Policies Under Instability: Post-1980 Turkey. *World Development,* 24**,** 373-393

Borras Jr., S., Hall, R., Scoones, I., White, B. and Wolford, W. (2011) Towards a better understanding of global land grabbing: an editorial introduction. *Journal of Peasant Studies,* 38**,** 209-216

Bowen, W. (2002) An Analytical Review of Environmental Justice Research: What Do We Really Know? *Environmental Management,* 29**,** 3-15

Bowen, W., Salling, M. J., Haynes, K. E. and Cyran, E. J. (1995) Toward Environmental Justice: Spatial Equity in Ohio and Cleveland. *Annals of the Association of American Geographers,* 85**,** 641-663

Boyle, M. (2002) Cleaning up after the Celtic Tiger: scalar 'fixes' in the political ecology of Tiger economies. *Transactions of the Institute of British Geographers,* 27**,** 172-194

Bozdoğan, S. (1997) The Predicament of Modernism in Turkish Architectural Culture: An Overview. In Bozdoğan, S. and Kasaba, R. (Eds.) *Rethinking Modernity and National Identity in Turkey.* Seattle: University of Washington Press.

Bozdoğan, S. (2013) Residential Architecture and Urban Landscape in İstanbul since 1950. In Pyla, P. (Ed.) *Landscapes of Development: The impact of modernization discourses on the physical environment of the Eastern Mediterranean.* Cambridge, MA:The Aga Khan Program.

Bozdoğan, S. and Kasaba, R. (Eds.) (1997) *Rethinking Modernity and National Identity in Turkey.* Seattle: University of Washington Press.

Bracken, L. J., Bulkeley, H. A. and Maynard, C. M. (2014) Micro-hydro power in the UK: The role of communities in an emerging energy resource. *Energy Policy,* 68**,** 92-101

Braun, B. (2006) Environmental issues: global natures in the space of assemblage. *Progress in Human Geography,* 30**,** 667-679

Brulle, R. J. and Pellow, D. N. (2006) Environmental Justice: Human Health and Environmental Inequalities. *Annu. Rev. Public Health,* 27**,** 103-124

Bryant, R. L. (1992) Political Ecology: An emerging research agenda in Third-World studies. *Political Geography,* 11**,** 12-36

Bryman, A. (2008) *Social Research Methods (Third Edition).* New York: Oxford University Press.

Budds, J. (2008) Whose Scarcity? The Hydrosocial Cycle and the Changing Waterscape of La Ligua River Basin, Chile. In Goodman, M. K., Boykoff, M. T. and Evered, T. (Eds.) *Contentious Geographies: Environmental Knowledge, Meaning, Scale.* Aldershot: Ashgate.

Budds, J. (2009) Contested $H_2O$: Science, Policy and politics in water resources management in Chile. *Geoforum,* 40**,** 418-430

Bullard, R. (1990) Ecological Inequities and the New South: Black Communities under Siege. *The Journal of Ethnic Studies,* 17**,** 101-115

Bullard, R. (1993) Race and Environmental Justice in the US. *Yale Journal of International Law,* 18**,** 319-335

Bullard, R. (1996) Environmental Justice: It's More Than Waste Facility Siting. *Social Science Quarterly,* 77**,** 493-499

Bullard, R. (1998) Anatomy of Environmental Racism and the Environmental Justice In Dryzek, J. S. and Schlosberg, D. (Eds.) *Debating the Earth: The Environmental Politics Reader.* New York: Oxford University Press.

Bullard, R. (1999) Environmental justice challenges at home and abroad. In Low, N. (Ed.) *Global Ethics and Environment.* London: Routledge.

Bullard, R. and Johnson, G. S. (2000) Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making. *Journal of Social Issues,* 56**,** 555-578

Bullard, R. D. (Ed.) (2005) *The quest for environmental justice: human rights and the politics of pollution.* San Francisco, CA: Sierra Club Books.

Bullard, R. D. and Wright, B. (Eds.) (2009) *Race, Place, and Environmental Justice after Hurricane Katrina: Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast.* The United States of America: Westview Press.

Bunce, S. and Desfor, G. (2007) Introduction to 'Political ecologies of urban waterfront transformations'. *Cities,* 24**,** 251-258

Burton, J. and Hubacek, K. (2007) Is small beautiful? A multicriteria assessment of small-scale energy technology applications in local governments. *Energy Policy,* 35**,** 6402-6412

Büyükyıldırım, G. (2008) Akarsu İstiksaf Seferberliği ve Genç Cumhuriyet'in Muhendisleri [Mobilisation of River Reconnaissance and Engineers of the Young Republic]. *Türkiye Mühendislik Haberleri,* 427**,** 42-46

Caney, S. (2009) Justice and the distribution of greenhouse gas emissions. *Journal of Global Ethics,* 5**,** 125-146

Capık, M., Yılmaz, A. O. and Çavuşoğlu, I. (2012) Hydropower for sustainable energy development in Turkey: The small hydropower case of the Eastern Black Sea Region. *Renewable and Sustainable Energy Reviews,* 16**,** 6160-6172

Carey, M., French, A. and O'Brien, E. (2012) Unintended effects of technology on climate change adaptation: an historical analysis of water conflicts below Andean Glaciers. *Journal of Historical Geography,* 38**,** 181-191

Çarkoğlu, A. and Eder, M. (2005) Development *alla Turca*: The Southeast Anatolia Development Project (GAP). In Adaman, F. and Arsel, M. (Eds.) *Environmentalism in Turkey: Between Democracy and Development?* Aldershot, England: Ashgate Publishing Limited.

Carruthers, D. V. (2008) *Environmental Justice in Latin America: problems, promise and practice.* Cambridge,MA: The MIT Press.

Carson, R. (1962) *Silent Spring.* New York: Penguin Books.

Castree, N. (2000) Marxism and the Production of Nature. *Capital & Class,* 2**,** 5-36

Castree, N. (2001) Introduction. In Braun, B. and Castree, N. (Eds.) *Social Nature: Theory, Practice and Politics.* Oxford: Blackwell.

Castree, N., Chatterton, P., Heynen, N., Larner, W. and Wright, M. W. (Eds.) (2010) *The Point To Change It: Geographies of Hope and Survival in an Age of Crisis.* Singapore: Wiley-Blackwell.

Çavuşoğlu, H. (2009) Türk Siyasi Hayatında Merkez Sağ Çizginin Tarihi [The History of the Centre-Right Spectrum in Turkish Political Life]. *Fırat University Journal of Social Science,* 19**,** 265-278

Çınar, M. (2006) Turkey's Transformation Under the *AKP* Rule. *The Muslim World,* 96, 469-486

Çınar, T. (2009) Privatisation of urban water and sewerage services in Turkey: some trends. *Development in Practice,* 19**,** 350-364

Chambers of Electrical Engineers, Turkey (Elektrik Mühendisleri Odasi, EMO). (2012) *Mikro HES'LER sadece doğaya ve insana değil hukuka da aykırı! [Micro HPPs are not only against humans and nature, they are also against the law!]* [Online] Available from: http://www.emo.org.tr/ekler/41da89556fb7b18_ek.pdf?dergi=681 [Accessed: 12 October 2015]

Clarke-Sather, A. (2012) State Development and the Rescaling of Agricultural Hydrosocial Governance in Semi-Arid Northwest China. *Water Alternatives,* 5**,** 98-118

Cloke, P. (2003) Knowing ruralities? In Cloke, P. (Ed.) *Country Visions.* China: Pearson Education Limited.

Cloke, P. (2006) Conceptualizing rurality. In Cloke, P., Marsden, T. and Mooney, P. H. (Eds.) *Handbook of Rural Studies.* London, Thousand Oaks and New Delhi: SAGE Publications.

CNNTURK. (2011) *İşte Başbakan'ın yeni projeleri...[Here it is, the new projects of the PM...]* [Online] Available from: http://www.cnnturk.com/2011/turkiye/06/01/iste.basbakanin.yeni.projeleri/618604.0/index.html [Accessed: 27 July 2014]

Çobanoğlu, S., Demirci, T. M., Karaağaç, G. and Babaoğlu, B. (Eds.) (2014) *'Öteden Gelenlerle Savaştık' Yuvarlakçay'da HES'e Direnişin Öyküsü ['We fought against*

*the outsiders' Story of HPP resistence of Yuvarlakçay]*.Muğla, Turkey: Yuvarlakçay Koruma Platformu and Municipality of Köyceğiz.

Coglianese, C. (1998) Implications of Liberal Neutrality for Environmental Policy. *Environmental Ethics,* 20**,** 41-59

Cohen, G. A. (1989) On the Currency of Egalitarian Justice. *Ethics*, 99**,** 906-944

Collin, R. W., Beatley, T. and Harris, W. (1995) Environmental Racism: A Challenge to Community Development. *Journal of Black Studies,* 25**,** 354-376

Colombo, J. (2014) Why The Worst Is Still Ahead For Turkey's Bubble Economy? *Forbes.* [Online] 3rd May. Available from: http://www.forbes.com/sites/jessecolombo/2014/03/05/why-the-worst-is-still-ahead-for-turkeys-bubble-economy/ [Accessed 25 July 2014]

Commonwealth of Massachusetts. (2002) *Environmental Justice Policy of the Executive Office Affairs*. Boston: Commonwealth of Massachusetts.

Conker, A. (2014) *An Enhanced notion of power for inter-state transnational hydropolitics: An Analysis of Turkish-Syrian Water Relations and the Ilisu Dam Conflict between the Opponents and Proponents of the Dam*. Unpublished PhD Thesis. School of Development Studies, University of East Anglia.

Cook, I. R. and Swyngedouw, E. (2012) Cities, Social Cohesion and the Environment: Towards A Future Research Agenda. *Urban Studies,* 49**,** 1959-1979

Corbin, J. and Morse, J. M. (2003) The Unstructured Interactive Interview: Issues of Reciprocity and Risks when Dealing with Sensitive Topics. *Qualitative Inquiry,* 9**,** 335-354

Coughlin, S. S. (1996) Environmental justice: the role of epidemiology in protecting unempowered communities from environmental hazards. *The Science of the Total Environment,* 184**,** 67-76

CounterCurrent (2011) *Dam construction in Turkey and its impact on economic, cultural and social rights*. Potsdam: CounterCurrent-GegenStromung.

Cowell, R., Bristow, G. and Munday, M. (2011) Acceptance, acceptability and environmental justice: the role of community benefits in wind energy development. *Journal of Environmental Planning and Management,* 54**,** 539-557

Cutter, S. L. (1995) Race, class and environmental justice. *Progress in Human Geography*, 19**,** 111-122

Cutter, S. L., Boruff, B. J. and Shirley, W. L. (2003) Social Vulnerability to Environmental Hazards. *Social Science Quarterly,* 84**,** 242-261

Davoudi, S. and Brooks, E. (2014) When does unequal become unfair? Judging claims of environmental injustice. *Environment and Planning A* 46**,** 2686-2702

De Santo, E. M. (2011) Environmental justice implications of Maritime Spatial Planning in the European Union. *Marine Policy,* 35**,** 34-48

Dear, M. (1992) Understanding and Overcoming the NIMBY Syndrome. *Journal of the American Planning Association,* 58**,** 288-300

Debbane, A. M. and Keil, R. (2004) Multiple disconnections: Environmental justice and urban water in Canada and South Africa. *Space and Polity,* 8**,** 209-225

Demirtaş, A. (2013) Rowing Boats in the Reservoir: Infrastructure as Transplanted Seascape. In Pyla, P. (Ed.) *Landscapes of Development: The impact of modernization discourses on the physical environment of the Eastern Mediterranean.* Cambridge, MA: The Aga Khan Program.

Desfor, G. and Vesalon, L. (2008) Urban Expansion and Industrial Nature: A Political Ecology of Toronto's Port Industrial District. *International Journal of Urban and Regional Research,* 32**,** 586-603

Dobson, A. (1998) *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice.* New York: Oxford University Press.

Dobson, A. (Ed.) (1999) *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice.* Oxford: Oxford University Press.

Dodge, J., Ospina, S. M. and Foldy, E. G. (2005) Integrating Rigor and Relevance in Public Administration Scholarship: The Contribution of Narrative Inquiry. *Public Administration Review,* 65**,** 286-300

Dowie, M. (1995) *Losing Ground: American Environmentalism at the Close of the Twentieth Century.* Cambridge, MA and London: The MIT Press.

Dryzek, J. S. (2000) *Deliberative Democracy and Beyond: Liberals, Critics, Contestations.* Oxford and New York: Oxford University Press.

Dursun, B. and Gokcol, C. (2011) The role of hydroelectric power and contribution of small hydropower plants for sustainable development in Turkey. *Renewable Energy,* 36**,** 1227-1235

Dworkin, R. (1981) What is Equality? Part 2: Equality of Resources. *Philosophy & Public Affairs,* 10**,** 283-345

Eberlein, C. and Heeb, M. (2011) *Climate Finance in Turkey: The contribution of the World Bank Clean Technology Fund to transforming the Turkish energy sector*. Zurich, Switzerland: Berne Declaration.

Eckersley, R. (2004) *The Green State: Rethinking Democracy and Sovereignty*. Cambridge, Massachusetts and London, England: The MIT Press.

Eckersley, R. (2005) Greening the Nation-State: From Exclusive to Inclusive Sovereignty. IN Barry, J. and Eckersley, R. (Eds.) *The State and the Global Ecological Crisis.* Cambridge, Massachusetts and London: The MIT Press.

Eken, G., Bozdoğan, M., Isfendiyeroğlu, S., Kılıç, T. D. and Lise, Y. (Eds.) (2006) *Türkiye'nin Önemli Doğa Alanları [Important Nature Reserves of Turkey]*. Ankara: Doğa Dernegi.

Elliot, J. R. and Pais, J. (2006) Race, class, and Hurricane Katrina: Social differences in human responses to disaster. *Social Science Research,* 35**,** 295-321

Environmental Justice Networks (EJNET). (1991) *Principles of Environmental Justice* [Online] Available from: http://www.ejnet.org/ej/principles.html [Accessed: 21 August 2015]

Environmental Justice Organizations, Liabilities and Trade (EJOLT). (2015) Maps [Online] Available from: http://www.ejolt.org/ [Accessed various times in 2015]

Eralp, A. (1990) The Politics of Turkish Development Strategies. In Finkel, A. and Sirman, N. (Eds.) *Turkish State, Turkish Society.* New York: Routledge.

Erensu, S. (2013) Abundance and scarcity amidst the crisis of 'modern water': the changing water-energy nexus in Turkey. In Harris, L. M., Goldin, J. A. and Sneddon, C. (Eds.) *Critical Perspectives on Contemporary Water Governance: Scarcity, marketization and participation.* Oxon: Earthscan.

Eryılmaz, C. (2012) *Social Ecology Challenges Environmental Participation: HES Opposition Cases in Turkey.* Unpublished PhD Thesis. Middle East Technical University.

European Investment Bank (EIB). (2008) *Turkey: EIB lends EUR 135 M for hydro-power project* [Online] Available from: http://www.eib.europa.eu/projects/press/2008/2008-065-turkey-eib-lends-eur-135-m-for-hydro-power-project.htm [Accessed 5 August 2014]

Evrensel. (2013) *Saklıkent HES'ten kurtuldu! [Saklıkent was saved from HPP!]* [online] Available from: http://www.evrensel.net/haber/73875/Saklıkent-hesten-kurtuldu.html [Accessed: 1 August 2014]

Faber, D. (2008) *Capitalizing on Environmental Injustice: The Polluter-Industrial Complex in the Age of Globalization.* Lanham: Rowman & Littlefield Publishers, Inc.

Fethiye Chambers of Commerce and Industry (FCCI). (2013) *2012 Sosyoekonomik Rapor [2012 Socioeconomic Report]*. Fethiye, Muğla, Turkey: Fethiye ChamberS of Commerce and Industry.

Fethiye Chambers of Commerce and Industry (FCCI). (2014) *2013 Fethiye Sosyoekonomik Rapor [Socio-economic Report of Fethiye, 2013]*. Fethiye, Muğla: Fethiye Chamber of Commerce and Industry.

Fischer, F. (2003) *Reframing Public Policy: Discursive Politics and Deliberative Practices*. Oxford, Oxford University Press.

Foucault, M. (1972) *The Archeology of Knowledge*. London and New York, Routledge.

Fraser, N. (1995) From redistribution to recognition? Dilemmas of Justice in a 'Post-Socialist' Age. *New Left Review***,** 68-93

Fraser, N. (2001) Recognition without Ethics? *Theory Culture Society,* 18**,** 21-42

Fraser, N. (2003) Social Justice in the Age of Identity Politics: Redistribution, Recognition, and Participation. In Fraser, N. and Honneth, A. (Eds.) *Redistribution or Recognition? A Political-Philosophical Exchange.* London and New York: Verso.

Friedman, J. (1997) What's wrong with Libertarianism. *Critical Review: A Journal of Politics and Society,* 11**,** 407-467

Fukuyama, F. (2009) Westernization vs. Modernization. *New Perspectives Quarterly,* 26**,** 84-89

Gandy, M. (2005) Cyborg Urbanization: Complexity and Monstrosity in the Contemporary City. *International Journal of Urban and Regional Research,* 29**,** 26-49

Garbin, D. and Millington, G. (2012) Territorial Stigma and the Politics of Resistance in a Parisian *Banlieue*: La Courneuve and Beyond. *Urban Studies,* 49**,** 2067-2083

Gibbons, F. and Moore, L. (2011) Turkey's Great Leap Forward risks cultural and environmental bankruptcy. *The Guardian* [online] 29 May. Available from: http://www.theguardian.com/world/2011/may/29/turkey-nuclear-hydro-power-development [Accessed: 10 February 2014]

Gibson-Wood, H. and Wakefield, S. (2013) 'Participation', White Privilege and Environmental Justice: Understanding Environmentalism Among Hispanics in Toronto. *Antipode,* 45**,** 641-662

Giddens, A. (1991) *The Consequences of Modernity.* Oxford: Polity Press.

Giroux, H. A. (2006) Reading Hurricane Katrina: Race, Class, and the Biopolitics of Disposability. *College Literature,* 33**,** 171-196

Gleick, P. H. (2000) A Look at Twenty-first Century Water Resources Development. *Water International,* 25**,** 127-138

Gleick, P. H. (2003) Water Use. *Annu. Rev. Environ.Resour.,* 28**,** 275-314

Gökdemir, M., Kömürcü, M. I. and Evcimen, T. U. (2012) Türkiye'de Hidroelektrik Enerji ve HES Uygulamalarina Genel Bakış [General Review on Hydroelectricity Energy and HPP Implementations in Turkey]. *TMH,* 471**,** 18-26

Goldman, M. (2006) *Imperial Nature: The World Bank and Struggles for Social Justice in the Age of Globalization,* United States of America: Yale University Press.

Goldman, M. and Schurman, R. A. (2000) Closing the 'Great Divide': New Social Theory on Society and Nature. *Annual Review of Sociology,* 26**,** 563-584

Gomez-Baggethun, E., Gren, A., Barton, D. N., Langemeyer, J., McPhearson, T., O'Farrell, P., Andersson, E., Hamstead, Z. and Kremer, P. (2013) Urban Ecosystem Services. In Elmqvist, T., Fragkias, M., Goodness, J., Guneralp, B., Marcotullio, P. J., McDonald, R. I., Parnell, S., Schewenius, M., Sendstad, M., Seto, K. C. and Wilkinson, C. (Eds.) *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities.* Heidelberg: Springer.

Goodin, R. E. (1992) *Green Political Theory.* Oxford and Cambridge, MA: Polity Press.

Greenberg, J. B. and Park, T. K. (1994) Political Ecology. *Journal of Political Ecology,* 1**,** 1-12

Greenberg, P. (1993) Proving Environmental Inequity in Siting Locally Unwanted Land Uses. *Risk,* 235**,** 235-252

Grove, K. (2009) Rethinking the nature of urban environmental politics: Security, subjectivity, and the non-human. *Geoforum,* 40**,** 207-216

Gülalp, H. (1999) Political Islam in Turkey: The Rise and Fall of the Refah Party. *The Muslim World,* LXXXIX**,** 22-41

Gülümser, A. A., Baycan Levent, T. and Nijkamp, P.:(2007) Changing trends in rural self-employment in Europe. *EUGEO2007 First International Conference on the Geography of Europe.* Amsterdam.

Güngör, M. K. (2010) *Şebeke Bağlantılı Yenilenebilir Elektrik Üretimi ile Karbondioksit Emisyon Azaltımı: Sekiyaka HES Projesi [Decreasing Carbondioxide Emissions through the Production of Grid-Connected Renewable Electricity: Sekiyaka HPP Project]*. Ankara: BEUAŞ.

Gürbüz, O. (2013) *Enerji mi önce tukenecek, Türkiye mi? [Will energy or Turkey be exhausted?]*. [Online] Available from: https://tr.boell.org/sites/default/files/perspectives_5_toplu_tr.pdf [Accessed on 18 July 2014].

Gürel, M., Ertürk, A., Şeker, D., Ekdal, A., Yüceil, K., Tanık, A. and Gönenç, I. E. (No Date) *Köyceğiz-Dalyan Havzası ekosistemini oluşturan çevresel özellikler-2 [Environmental features constituting Köyceğiz-Dalyan ecosystem-2]*. [Online] Available from: http://www.igemportal.org/Resim/KÖYCEĞİZ_Havzasi_Yonetimi_2.pdf [Accessed on 7 October 2015].

Gutmann, A. and Thompson, D. F. (Eds.) (1996) *Democracy and disagreement.* Cambridge, Massachussetts: Belknap Press of Harvard University Press.

Haber7. (2014) *Eroğlu: Tek başıma mücadele ediyorum [Eroğlu: I am fighting alone]* [Online] Available from: http://www.haber7.com/ic-politika/haber/1152474-Eroğlu-tek-basima-mucadele-ediyorum [Accessed: 27 July 2014]

Hajer, M. and Versteeg, W. (2005) A Decade of Discourse Analysis of Environmental Politics: Achievements, Challenges, Perspectives. *Journal of Environmental Policy & Planning,* 7**,** 175-184

Hajer, M. A. (1995) *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process.* New York: Oxford University Press.

Hale, W. (2002) *Turkish Foreign Policy, 1774-2000.* London: Frank Cass Publishers.

Hamsici, M. (2010) *Dereler ve İsyanlar [Brooks and Revolts]*. Ankara: Nota Bene.

Harlan, S. L., Brazel, A. J., Prashad, L., Stefanov, W. L. and Larsen, L. (2006) Neighborhood microclimates and vulnerability to heat stress. *Social Science & Medicine,* 63**,** 2847-2863

Harris, L. M. (2008) Modernizing the nation: Postcolonialism, postdevelopmentalism, and ambivalent spaces of difference in southeastern Turkey. *Geoforum,* 39**,** 1698-1708

Harris, L. M. and Islar, M. (2013) Neoliberalism, nature and changing modalities of environmental governance in contemporary Turkey. In Atasoy, Y. (Ed.) *Global Economic Crisis and the Politics of Diversity.* London and New York: Palgrave MacMillan.

Harvey, D. (1996) *Justice, nature, and the geography of difference.* Cambridge, MA: Blackwell Publishers.

Hayward, T. (2007) Human Rights Versus Emissions Rights: Climate Justice and the Equitable Distribution of Ecological Space. *Ethics & International Affairs,* 21**,** 431-450

Heiman, M. (1990) From 'Not in My Backyard!' to 'Not in Anybody's Backyard!'. *Journal of the American Planning Association,* 56**,** 359-362

Heiman, M. (1996) Race, Waste, and Class: New Perspectives on Environmental Justice. *Antipode,* 28**,** 111-121

Herian, M. N., Hamm, J. A., Tomkins, A. J. and Pytlik Zillig, L. M. (2012) Public Participation, Procedural Fairness, and Evaluations of Local Governance: The Moderating Role of Uncertainty. *Journal of Public Administration Research and Theory,* 22**,** 815-840

Heynen, N. C. (2003) The Scalar Production of Injustice within the Urban Forest. *Antipode,* 35**,** 980-998

Heynen, N. C., Kaika, M. and Swyngedouw, E. (2006b) Urban political ecology: politicizing the production of urban natures. In Heynen, N. C., Kaika, M. and Swyngedouw, E. (Eds.) *In the Nature of Cities: Urban political ecology and the politics of urban metabolism.* London and New York: Routledge.

Heynen, N. C., McCarthy, J., Prudham, S. and Robbins, P. (2007a) Introduction: false promises. In Heynen, N. C., McCarthy, J., Prudham, S. and Robbins, P. (Eds.) *Neoliberal Environments: False promises and unnatural consequences.* Abingdon, UK: Routledge.

Heynen, N. C., Perkins, H. A. and Roy, P. (2006c) The Political Ecology of Uneven Urban Green Space: The Impact of Political Economy on Race and Ethnicity in Producing Environmental Inequality in Milwaukee. *Urban Affairs Review,* 42**,** 3-25

Hilton, A. (2012) Foreword. In Öztürk, M. (Ed.) *Agriculture, peasantry and poverty in Turkey in the neo-liberal age.* Wageningen: Wageningen Academic Publishers.

Hockman, E. and Morris, C. (1998) Progress towards Environmental Justice: A Five-Year Perspective of Toxicity, Race and Poverty in Michigan 1990-1995 1. *Journal of Environmental Planning and Management,* 41**,** 157-176

Hoffman, E. and Spitzer, M. L. (1985) Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice. *The Journal of Legal Studies,* 14**,** 259-297

Holifield, R. (2001) Defining Environmental Justice and Environmental Racism. *Urban Geography,* 22**,** 78-90

Holifield, R. (2009) Actor-Network Theory as A Critical Approach to Environmental Justice: A Case against Synthesis with Urban Political Ecology. *Antipode,* 41**,** 637-658

Holifield, R. (2012) Environmental Justice as Recognition and Participation in Risk Assessment: Negotiating and Translating Health Risk at a Superfund Site in Indian Country. *Annals of the Association of American Geographers,* 102**,** 591-613

Holifield, R., Porter, M. and Walker, G. (2009) Introduction Spaces of Environmental Justice: Frameworks for Critical Engagement. *Antipode,* 41**,** 591-612

Honneth, A. (2001) Recognition or Redistribution? Changing Perspectives on the Moral Order of Society. *Theory Culture Society,* 18**,** 43-55

Honneth, A. (2004) Recognition and Justice: Outline of a Plural Theory of Justice. *Acta Sociologica,* 47**,** 351-364

Hunold, C. and Young, I. M. (1998) Justice, Democracy, and Hazardous Siting. *Political Studies,* 46**,** 82-95

Hürriyet. (2012) *''Su Akar, Türk Yapar'' [''Water flows, Turk constructs'']* [Online] Available from: http://www.Hürriyet.com.tr/ekonomi/22145097.asp [Accessed: 15 August 2015]

Hürriyet. (2013) *Alakır'da HES Direnişi [HPP Resistence in Alakir]* [Online] Available from: http://www.Hürriyet.com.tr/gundem/24573101.asp [Accessed: 25 March 2014]

Ikeme, J. (2003) Equity, environmental justice and sustainability: incomplete approaches in climate change politics. *Global Environmental Change*, 13**,** 195-206

İlhan, A. (2009) *Social Movements in Sustainability Transitions: Identity, Social Learning & Power in the Spanish and Turkish Water Domains.* Unpublished PhD Thesis. Universitat Autonoma de Barcelona.

International Commission on Large Dams (2015) *General Sythesis*. [Online] Available from: http://www.icold-cigb.org/GB/World_register/general_synthesis.asp [Accessed on 7 October 2015]

International Energy Agency. (2000) *Implementing Agreement for Hydropower Technologies and Programmes Annex III: Hydropower and the Environment PrEsent Context and Guidelines*. International Energy Agency.

International Energy Agency. (2010) *Renewable Energy Essentials: Hydropower OECD/IEA* [Online] Available from: http://www.iea.org/publications/freepublications/publication/hydropower_essentials.pdf [Accessed: 7 October 2015]

International Energy Agency. (2012) *Technology Roadmap: Hydropower* [Online] Available from: https://www.iea.org/publications/freepublications/publication/2012_Hydropower_Roadmap.pdf [Accessed 6 October 2015]

Internet Muğla (2010) *Fethiye TEMA'da HES Tepkisi [HPP Opposition at Fethiye TEMA]* [Online] Available from: http://www.internetMuğla.com/Muğla/fethiye/fethiye-temada-hes-tepkisi-8717h.html [Accessed: 17 May 2015]

Ioris, A. A. R. (2010) The Political Nexus between Water and Economics in Brazil: A Critique of Recent Policy Reforms. *Review of Radical Political Economics,* 42**,** 231-250

Islar, M. (2012a) Privatised Hydropower Development in Turkey: A Case of Water Grabbing? *Water Alternatives,* 5**,** 376-391

Islar, M. (2012b) Struggles for recognition: privatisation of water use rights of Turkish rivers. *Local Environment: The International Journal of Justice and Sustainability,* 17**,** 317-329

Islar, M. and Boda, C. (2014) Political ecology of inter-basin water transfers in Turkish water governance. *Ecology and Society,* 19**,** 15-23

Johnson, G. S. (2008) Environmental Justice and Katrina: A Senseless Environmental Disaster. *The Western Journal of Black Studies,* 32**,** 42-52

Joss, S. and Brownlea, A. (1999) Considering the concept of procedural justice for public policy-and decision-making in science and technology. *Science and Public Policy,* 26**,** 321-330

Justice and Development Party (AK Parti). *2015 Hedefler-Çevre ve Şehircilik [Targets-Environment and Urbanisation]* [Online] Available from: https://www.akparti.org.tr/site/hedefler/cevre-ve-sehircilik/11007 [Accessed: 21 August 2015]

Kadirbeyoğlu, Z. (2010) In the Land of Ostriches: Developmentalism, Environmental Degradation, and Forced Migration in Turkey. In Afifi, T. and Jager, J. (Eds.) *Environment, Forced Migration and Social Vulnerability.* Berlin Heidelberg: Springer-Verlag.

Kadirbeyoğlu, Z. and Kurtiç, E. (2013) Problems and prospects for genuine participation in water governance in Turkey. In Harris, L. M., Goldin, J. A. and Sneddon, C. (Eds.) *Contemporary Water Governance in the Global South: Scarcity, marketization and participation.* London and New York: Earthscan.

Kaika, M. (2005) *City of Flows: modernity, nature and the city.* New York: Routledge.

Kallis, G. (2011) In defence of degrowth. *Ecological Economics,* 70**,** 873-880

Kallis, G., Kerschner, C. and Martinez-Alier, J. (2012) The economics of degrowth. *Ecological Economics,* 84**,** 172-180

Karagöz, U. (2014) *Environmental Justice Atlas: Loc Valley HPP Turkey* [Online] Available from http://ejatlas.org/conflict/loc-valley-cide-hydroelectric-power-plant-turkey [Accessed: 15 July 2014]

Kasaba, R. (1997) Kemalist Certainties and Modern Ambiguities. In Bozdoğan, S. and Kasaba, R. (Eds.) *Rethinking Modernity and National Identity in Turkey.* Seattle: University of Washington Press.

Kaya, D. (2006) Renewable energy policies in Turkey. *Renewable and Sustainable Energy Reviews,* 10**,** 152-163

Kaygusuz, K. and Arsel, M. (2005) Energy Politics and Policy. In Adaman, F. & Arsel, M. (Eds.) *Environmentalism in Turkey: Between Democracy and Development?* Aldershot: Ashgate.

Keil, R. (2003) Urban Political Ecology Progress Report. *Urban Geography,* 24**,** 723-738

Kentel, E. and Alp, E. (2013) Hydropower in Turkey: Economical, social and environmental aspects and legal challenges. *Environmental Science & Policy,* 31, 34-43

Keyder, C. (1997) Whither the Project of Modernity? Turkey in the 1990s. In Bozdoğan, S. and Kasaba, R. (Eds.) *Rethinking Modernity and National Identity in Turkey.* Seattle: University of Washington Press.

Keyder, C. and Yenal, Z. (2011) Agrarian Change under Globalization: Markets and Insecurity in Turkish Agriculture. *Journal of Agrarian Change,* 11**,** 60-86

Keyman, E. F. (2005) Modernity, Democracy, and Civil Society. In Adaman, F. and Arsel, M. (Eds.) *Environmentalism in Turkey: Between Democracy and Development.* Aldershot, England: Ashgate Publishing Company.

Kibaroğlu, A. (2007) Politics of Water Resources in the Jordan, Nile and Tigris-Euphrates: Three River Basins, Three Narratives. *Perceptions,* Spring**,** 143-164

Kibaroğlu, A., Başkan, A. and Alp, S. (2009) Neo-liberal transitions in hydropower and irrigation water management in Turkey: main actors and opposition groups. In Huitima, D. and Miejerink, S. (Eds.) *Water Policy Entrepreneurs: A Research Companion to Water Transitions around the Globe.* Cheltenham, UK: Edward Elgar Publishing Limited.

Kibaroğlu, A., Scheumann, W. and Kramer, A. (Eds.) (2011) *Turkey's Water Policy: National Frameworks and International Cooperation,* Berlin, Heidelberg: Springer-Verlag.

Kibaroğlu, A., Scheumann, W. and Sümer, V. (2012) Fundamental Shifts in Turkey's Water Policy. *Journal of Mediterranean Geography,* 119**,** 27-34

Kilci, M.(1994) *Başlangıcından Bugüne Türkiye'de Özelleştirme Uygulamaları (1984-1994) [Applications of the Privatization in Turkey from Its Beginning to Today]*. Ankara: State Planning Organisation.

Kim, W. C. and Mauborgne, R. (1998) Procedural justice, strategic decision making, and the knowledge economy. *Strategic Management Journal,* 19**,** 323-338

Klinenberg, E. (1997) Denaturalizing disaster: A social autopsy of the 1995 Chicago heat wave. *Theory and Society,* 28**,** 239-295

Kömürcü, M. I. and Akpınar, A. (2010) Hydropower Energy Versus Other Energy Sources in Turkey. *Energy Sources Part B: Economics, Planning, and Policy,* 5**,** 185-198

Kosnik, L. (2010) The potential for small scale hydropower development in the US. *Energy Policy,* 38**,** 5512-5519

Kraft, M. E. and Scheberle, D. (1995) Environmental Justice and the Allocation of Risk: The Case of Lead and Public Health. *Policy Studies Journal: the Journal of the Policy Studies Organization,* 23**,** 113-122

Küçükali, S. (2014) Finding the most suitable existing hydropower reservoirs for the development of pumped-storage schemes: An integrated approach. *Renewable and Sustainable Energy Reviews,* 37**,** 502-508

Kudat, A., Peabody, S. and Keyder, C.:(2000) Social Assessment and Agricultural Reform in Central Asia and Turkey. *Europe and Central Asia Environmentally and Socially Sustainable Development Series.* The World Bank.

Kuehn, R. R. (2000) A Taxonomy of Environmental Justice. *Environmental Law Reporter,* 30**,** 10681-10703

Kumar, A., Schei, A., Ahenkorah, R., Cacares-Rodriguez, J., Freitas, M., Hall, D., Killingtveit, A. and Liu, Z. (2011) Hydropower. In Edenhofer, O., Pichs-Madruga, R., Sokona, Y., Seyboth, K., Matschoss, P., Kadner, S., Zwickel, T., EickemEİEr, P., Hansen, G., Schlomer, S. and von Stechow, C. (Eds.) *IPCC Special Report of Renewable Energy Sources and Climate Change Mitigation.* Cambridge and New York: Cambridge University Press.

Kurdoğlu, O. (2014) *Environmental Justice Atlas: Artvin Kabaca Valley Hydroelectric Power Plant Turkey EJOLT* [Online] Available from http://ejatlas.org/conflict/artvin-kabaca-valley-hydro-power-plant-turkey [Accessed: 21 August 2015]

Kurtiç, E. (2014) *Environmental Justice Atlas: Tortum-Bağbaşı Hydroelectric Power Plant Turkey EJOLT* [Online] Available from http://ejatlas.org/conflict/tortum-bagbasi-hydroelectric-power-plant-turkey [Accessed: 21 August 2015]

Lake, R. W. (1996) Volunteers, NIMBYs, and Environmental Justice: Dilemmas of Democratic Practice. *Antipode,* 28**,** 160-174

Latour, B. (1993) *We Have Never Been Modern.* Cambridge, MA: Harvard University Press.

Latour, B. (2003) Is Re-modernization Occurring-And If So, How to Prove It?: A Commentary on Ulrich Beck. *Theory Culture Society,* 20**,** 35-47

Laurent, E. (2011) Issues in environmental justice within the European Union. *Ecological Economics,* 70**,** 1846-1853

Laurian, L. (2008) Environmental Injustice in France. *Journal of Environmental Planning and Management,* 51**,** 55-79

Lawrence, R. L., Daniels, S. E. and Stankey, G. H. (1997) Procedural justice and public involvement in natural resource decision making. *Society & Natural Resources: An International Journal,* 10**,** 577-589

Leach, M., Mearns, R. and Scoones, I. (1999) Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resources Management. *World Development,* 27**,** 225-247

Leblebici, N. (2012) *Hidroelektrik Santrallerin Kurulması İçin Gerekli Olan Arazilerin Elde Edilmesi [Obtainment of the lands required to construct hydroelectric power plants]*. 12th Turkey Energy Congress. Ankara.

Leonard, L. G. (1997) Sovereignty, Self-Determination, and Environmental Justice in the Mescalero Apache's Decision to Store Nuclear Waste. *Boston Collage Environmental Affairs Law Review,* 24**,** 651-693

Leopold, A. (1968) *A Sand County Almanac and Sketches Here and There.* Oxford: Oxford University Press.

Levermore, R. (2010) CSR for Development Through Sport: examining its potential and limitations. *Third World Quarterly,* 31**,** 223-241

Li, T. M. (2009) To Make Live or Let Die? Rural Dispossession and the Protection of Surplus Populations. *Antipode,* 41**,** 66-93

Linton, J. (2010) *What is Water? The History of a Modern Abstraction.* Vancouver, BC: UBC Press.

Linton, J. and Budds, J. (2014) The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum,* 57**,** 170-180

Llurdes, J.-C., Sauri, D. and Cerdan, R. (2003) Ten years wasted: the failure of siting waste facilities in central Catalonia, Spain. *Land Use Policy,* 20**,** 335-342

Loftus, A. (2007) Working the Socio-Natural Relations of the Urban Waterscape in South Africa. *International Journal of Urban and Regional Research,* 31**,** 41-59

Loftus, A. (2012) *Everyday Environmentalism: Creating an Urban Political Ecology.* Minneapolis and London: University of Minnesota Press.

Low, N. and Gleeson, B. (1998) *Justice, society, and nature: an exploration of political ecology.* London and New York: Routledge.

Maantay, J. and Marako, A. (2009) Mapping urban risk: Flood hazards, race, & environmental justice in New York. *Applied Geography,* 29**,** 111-124

Mack, E. (2009) What Is Left-Libertarianism? In de Wijze, S., Kramer, M. H. and Carter, I. (Eds.) *Hillel Steiner and the Anatomy of Justice: Themes and Challenges.* New York:Routledge.

Mardin, Ş. (1997) Projects as Methodology: Some Thoughts on Modern Turkish Social Science. In Bozdoğan, S. and Kasaba, R. (Eds.) *Rethinking Modernity and National Identity in Turkey.* Seattle: University of Washington Press.

Martin, A., Gross-Camp, N., Kebede, B., McGuire, S. and Munyurukaza, J. (2014) Whose environmental justice? Exploring local and global perspectives in a payments for ecosystem services scheme in Rwanda. *Geoforum,* 54**,** 167-177

Martin, A., McGuire, S. and Sullivan, S. (2013) Global environmental justice and biodiversity conservation. *The Geographical Journal,* 179**,** 122-131

Martinez-Alier, J. (2002) *The environmentalism of the poor a study of ecological conflicts and valuation.* Northampton, MA: Edward Elgar Publishing.

Mason, M. (2010) Information disclosure and environmental rights: the Aarhus Convention. *Global Environmental Politics,* 10**,** 10-31

McCully, P. (2001) *Silenced Rivers: The ecology and politics of large dams.* London: Zed Books.

McDonald, D. A. (2002) *Environmental Justice in South Africa.* Athens and Cape Town: Ohio University Press and University of Cape Town Press.

Mill, J. S. (1972) *Utilitarianism, Liberty, ReprEsentative Government.* London: J.M. Dent & Sons Ltd.

Miller, D. (1992) Distributive Justice: What the People Think. *Ethics,* 102**,** 555-593

Milliyet. (2005a) *'Erdoğan: 'Bu çevrecilerle ne yapacağız? Hayat mücadele''[Erdoğan: What are we going to do with these environmentalists? Life is a struggle'* [Online] Available from: http://www.milliyet.com.tr/2005/01/08/son/sonsiy10.html [Accessed: 14 August 2013]

Milliyet. (2005b) *HES'leri özel sektör tamamlayacak [Private sector will complete HPPs]* [Online] Available from: http://www.milliyet.com.tr/hes-leri-ozel-sektor-tamamlayacak/ekonomi/haberdetayarsiv/28.07.2005/125574/default.htm [Accessed: 6 October 2015]

Milliyet. (2015) Alakır HES mücadelesinde silah sesleri [Weapons speak in Alakir HPP opposition] [Online] Available from: http://www.milliyet.com.tr/alakir-hes-mucadelesinde-silah-gundem-2097453/ [Accessed: 25 August 2015]

Mohai, P. and Bryant, B. (1992) Environmental injustice: Weighing race and class as factors in the distribution of environmental hazards. *University of Colorado Law Review*, 63**,** 921-932

Mohai, P., Pellow, D. and Roberts, J. T. (2009) Environmental Justice. *Annual Review of Environment and Resources*, 34**,** 405-430

Morgan, D. L. (1998) *The Focus Group Guidebook: Focus Group Kit 1*. Thousand Oaks, California: SAGE Publications Inc.

Morgan, D. L. and Kruger, R. A. (1998) *The Focus Group Kit.* Thousand Oaks & London & New Delhi: SAGE Publications.

Muradian, R., Walter, M. and Martinez-Alier, J. (2012) Hegemonic transitions and global shifts in social metabolism: Implications for resource-rich countries. Introduction to the special section. *Global Environmental Change*, 22**,** 559-567

Murdoch, J. (2003) Co-constructing the countryside: hybrid networks and the extensive self. In Cloke, P. (Ed.) *Country Visions.* China: Pearson Education Limited.

Nalbantoğlu, G. (1997) Silent Interruptions: Urban Encounters with Rural Turkey. In Kasaba, R. and Bozdoğan, S. (Eds.) *Rethinking Modernity and National Identity in Turkey*. Seattle: University of Washington Press.

Nozick, R. (1973) Distributive Justice. *Philosophy & Public Affairs*, 3**,** 45-126

NTVMSNBC. (2010) '*Dereler yok oluyor...'['Brooks are disappearing...']* [Online] Available from: http://www.ntvmsnbc.com/id/25112583 [Accessed: 14 August 2013]

O'Neill, C. (2003) Risk Avoidance, Cultural Discrimination, and Environmental Justice for Indigenous Peoples. *Ecology Law Quarterly*, 30**,** 1-58

Organization of Economic Cooperation and Development (OECD). (2011) *Evaluation of Agricultural Policy Reforms in Turkey.* OECD Publishing.

Okereke, C. and Charlesworth, M. (2014) Environmental and Ecological Justice. In Betsill, M., Hochstetler, K. and Stevis, D. (Eds.) *Advances in International Environmental Politics.* London: Palgrave Macmillan.

Onaran, M. A., Özdemir, N. and Yılmaz, F. (2006) The Fish Fauna of Esen Stream (Fethiye-Muğla). *International Journal of Science and Technology*, 1**,** 35-41

Öniş, Z. (2006) Varities and crises of neoliberal globalisation: Argentina, Turkey and the IMF. *Third World Quarterly,* 27**,** 239-263

Öniş, Z. (2012) The triumph of Conservative Globalism: The Political Economy of the AKP Era. *Turkish Studies,* 13 (2), 135-152

Öniş, Z. and Aysan, A. F. (2000) Neoliberal globalisation, the nation-state and financial crises in the semi-periphery: A comparative analysis. *Third World Quarterly,* 21**,** 119-139

Öniş, Z. and Yılmaz, Ş. (2009) Between Europeanization and Euro-Asianism: Foreign Policy Activism in Turkey during the AKP Era. *Turkish Studies,* 10 (1), 7-24

Otero, I., Kallis, G., Aguilar, R. and Ruiz, V. (2011) Water scarcity, social power and the production of an elite suburb: The political ecology of water in Matadepera, Catalonia. *Ecological Economics,* 70**,** 1297-1308

Özesmi, U. (2013) Water: Life? An agent of political space and protest? An instrument of hegemony? In Harris, L. M., Goldin, J. A. and Sneddon, C. (Eds.) *Contemporary Water Governance in the Global South: Scarcity, marketization and participation.* Oxon: Earthscan.

Özkaynak, B., Aydın, I. C., Ertör-Akyazı, P. and Ertör, I. (2015) The Gezi Park Resistance from an Environmental Justice and Social Metabolism Perspective. *Capitalism Nature Socialism,* 26**,** 99-114

Öztürk, M. (2012) *Agriculture, peasantry and poverty in Turkey in the neo-liberal age,* Wageningen: Wageningen Academic Publishers.

Öztürk, M. (2013) *1980 sonrasi tarimda ve kirsalda donusum dinamikleri [Transformation dynamics of agriculture and rural in post-1980 era]*. [Online] Available from: https://tr.boell.org/sites/default/files/perspectives_6_dergi_taslak_tr_son.pdf [Accessed: 26 August 2014]

Öztürk, M., Hilton, A. and Jongerden, J. (2014) Migration as Movement and Multiplace Life: Some Recent Developments in Rural Living Structures in Turkey. *Population, Space and Place,* 20**,** 370-388

Özveren, E. and Nas, S. E. (2012) Economic development and environmental policy in Turkey: an institutionalist critique. *Cambridge Journal of Economics,* 36**,** 1245-1266

Paavola, J. (2007) Institutions and environmental governance: A reconceptualization. *Ecological Economics,* 63**,** 93-103

Paavola, J. and Adger, W. N. (2006) Fair adaptation to climate change. *Ecological Economics,* 56**,** 594-609

Page, E. A. (2008) Distributing the burdens of climate change. *Environmental Politics,* 17**,** 556-575

Pamuk, Ş. (2012) Editor's introduction: Turkey's experience with neoliberal policies and globalization since 1980. *New Perspectives on Turkey,* 47**,** 5-10

Parasuraman, S. (1996) Development Project, Displacement and Outcomes for Displaced Two Case Studies. *Economic and Political Weekly,* 31**,** 1297-1308

Pastor, M., Sadd, J. and Hipp, J. (2001) Which Came First? Toxic Facilities, Minority Move-in and Environmental Justice. *Journal of Urban Affairs,* 23**,** 1-21

Patterson, M. and Monroe, K. R. (1998) Narrative in political science. *Annual Review of Political Science,* 1**,** 315-331

Patton, M. Q. (2002) *Qualitative research & evaluation methods.* Thousand Oaks, California and London: SAGE.

Peet, R. and Hartwick, E. (2009) *Theories of Development: Contentions, arguments, alternatives.* New York and London: The Guilford Press.

Peet, R. and Watts, M. (1996) Liberation Ecology: Development, sustainability, and environment in an age of market triumphalism. In Peet, R. and Watts, M. (Eds.) *Liberation Ecologies: environment, development, social movements.* London and New York: Routledge.

Pellow, D., Weinberg, A. and Schnaiberg, A. (2001) The Environmental Justice Movement: Equitable Allocation of the Costs and Benefits of Environmental Management Outcomes. *Social Justice Research,* 14**,** 423-439

Pena, D. G. (2005) Autonomy, Equity, and Environmental Justice. In Pellow, D. N. and Brulle, R. J. (Eds.) *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement.* Cambridge, Massachusetts: The MIT Press.

Polat, M. (2010) *Fethiye Söğütlüdere Köylüleri de Hidroelektrik Santral İstemiyor [Peasants of Söğütlüdere Village, Fethiye do not want hydroelectricity power plant too]* [Online] Available from: http://www.karasaban.net/fethiye-Söğütlüdere-koyluleri-de-hidroelektrik-santral-istemiyor/ [Accessed 21 August 2015]

Polat, M. (2011) *Fethiye Kargı Çayında Hukuk Çiğneniyor [Legal Violations at Fethiye Kargı Stream]* [Online] Available from: http://www.karasaban.net/fethiye-Kargı-cayinda-hukuk-cigneniyor%E2%80%A6mehmet-polat/ [Accessed: 21 August 2015]

Premalatha, M., Tabassum-Abbasi, Abbasi, T. and Abbasi, S. A. (2014) A critical view on the eco-friendliness of small hydroelectric installations. *Science of the Total Environment,* 481**,** 638-643

Prior, L. (2004) Following in Foucault's Footsteps: Text and Context in Qualitative Research. In Hesse-Biber, S. N. and Leavy, P. (Eds.) *Approches to Qualitative Research: A Reader on Theory and Practice.* New York and Oxford: Oxford University Press.

Prudham, S. (2009) Pimping climate change: Richard Branson, global warming, and the performance of green capitalism. *Environment and Planning A*, 37**,** 1594-1613

Pulido, L. (1996a) A critical review of the methodology of environmental racism research. *Antipode,* 28**,** 142-159

Pulido, L. (1996b) *Environmentalism and economic justice: two Chicano struggles in the Southwest.* Tuscon: University of Arizona Press.

Pulido, L. (2000) Rethinking Environmental Racism: White Privilege and Urban Development in Southern California. *Annals of the Association of American Geographers*, 1**,** 12-40

Radikal. (2009) *'Çevre Bakanı çevrecilere kızdı' [The Minister of Environment is angry with the environmentalists]* [Online] Available from: http://www.radikal.com.tr/Radikal.aspx?aType=HaberYazdir&ArticleID=921943 [Accessed: 14 August 2013]

Radikal. (2010) *'Taner Yıldız'dan Baykal'a HES teşekkürü, Kılıçdaroğlu'na Mesaj' [Taner Yıldız thanked to Baykal while sending message to Kılıçdaroğlu]* [Online] Available from: http://www.radikal.com.tr/ekonomi/taner_yildizdan_baykala_hes_tesekkuru_kilicdarogluna_mesaj-1012062 [Accessed: 26 July 2013]

Ragin, C. C. (1989) *The Comparative Method: Moving beyond qualitative and quantitative strategies.* Berkeley, Los Angeles and London: University of California Press.

Randeria, S. (2003) Glocalization of Law: Environmental Justice, World Bank, NGOs and the Cunning State in India. *Current Sociology*, 51, 305-328

Rasinski, K. A. (1987) What's Fair Is Fair-Or Is It? Value Differences Underlying Public Views About Social Justice. *Journal of Personality and Social Psychology,* 53**,** 201-211

Rawls, J. (1971) *A Theory of Justice.* Cambridge, MA and London: The Belknap Press of Harvard University Press.

Rawls, J. (1985) Justice as Fairness: Political not Metaphysical. *Philosophy & Public Affairs*, 14**,** 223-251

Reddy, V. R., Uitto, J. I., Frans, D. R. and Matin, N. (2006) Achieving global environmental benefits through local development of clean energy? The case of small hilly hydel in India. *Energy Policy,* 34**,** 4069-4080

Republic of Turkey. Energy Market Regulatory Authority (*Enerji Piyasalari Denetleme Kurumu*, EPDK). (2012) *Turkish Energy Market: An Investor's Guide*. Ankara, EPDK.

Republic of Turkey. Energy Market Regulatory Authority (EPDK) (2015) *Elektrik Piyasası Uretim Lisanslari [Electricity Market Production Licences]-Licence Investigation Database*. Ankara: Energy Market Regulatory Authority.

Republic of Turkey. General Directorate of Cultural Assets and Museums. (2015) *Xanthos-Letoon (Antalya-Muğla)* [Online] Available from: http://www.kulturvarliklari.gov.tr/TR,44429/xanthos-letoon-antalya---Muğla.html [Accessed: 21 August 2015]

Republic of Turkey. General Directorate of Meteorology (MGM, *Meteoroloji Genel Müdürlüğü*) (2014) *Resmi İstatistikler [Official Statistics]* [Online] Available from: http://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=MUĞLA#sfB [Accessed 26 July 2014]

Republic of Turkey. State Hydraulic Works (*Devlet Su İşleri*, DSİ). (2014) *2013 Faaliyet Raporu [Activity Report of 2013]*. Ankara: DSİ.

Republic of Turkey. State Hydraulic Works (*Devlet Su İşleri*, DSİ). (2015) *Hakkımızda [About us]* [online] Available from: http://DSİ.gov.tr/kurumsal-yapi/hakkimizda#vizyon [Accessed various times between 2012 and 2015]

Republic of Turkey. State Planning Organisation (*Devlet Planlama Teşkilatı*, DPT). (1963) *Kalkınma Planı (Birinci Beş Yıl) 1963-1967 [Development Plan (The First Five Years) 1963-1967]*. Ankara: DPT.

Republic of Turkey. State Planning Organisation (*Devlet Planlama Teşkilatı*, DPT). (1967) *İkinci Beş Yıllık Kalkınma Planı 1968-1972 [The Second Five-Year Development Plan 1968-1972]*. Ankara: DPT.

Republic of Turkey. State Planning Organisation (*Devlet Planlama Teşkilatı*, DPT). (1989) *Altıncı Beş Yıllık Kalkınma Planı (1990-1994) [The Sixth Five-Year Development Plan (1990-1994)]*. Ankara: DPT.

Republic of Turkey. State Planning Organisation (*Devlet Planlama Teşkilatı*, DPT). (1995) *Yedinci Beş Yıllık Kalkınma Planı (1996-2000) [The Seventh Five-Year Development Plan (1996-2000)]*. Ankara: DPT.

Republic of Turkey. The Ministry of Agriculture and Rural Affairs (2010) *Kırsal Kalkınma Planı (2010-2013) [Rural Development Plan (2010-2013)*. Ankara: The Ministry of Agriculture and Rural Affairs.

Republic of Turkey. The Ministry of Environment and Urbanisation. (2015a) *Aydın-Muğla-Denizli Planlama Bölgesi 1/100000 Ölçekli Çevre Düzeni Planı Değişiklik Listesi*

*[List of Changes in 1/100000-scaled-zoning-plan of the region of Aydın-Muğla-Denizli]* [Online] Available from: http://www.csb.gov.tr/db/mpgm/editordosya/file/CDP_100000/amd/amd_DEGISIKLIK_LISTESI.pdf [Accessed: 21 August 2015]

Republic of Turkey. The Ministry of Environment and Urbanisation. (2015b) *İlk ÇED Yönetmeliği'nin yayımlandığı 1993 yılından 2014 yılı sonuna kadar verilen ÇED kararları [EIA decisions from the issue of the first EIA by-law (1993) to the end of 2014] The Ministry of Environment and Urbanisation* [Online] Available from: http://www.csb.gov.tr/db/ced/icerikbelge/icerikbelge2910.pdf [Accessed: 25 August 2015]

Republic of Turkey. *The Ministry of Environment and Urbanisation. (2014) Fethiye-Göcek Özel Çevre Koruma Bölgesi [Fethiye-Göcek Special Environmental Protection Area]* [Online] Available from: http://www.csb.gov.tr/gm/tabiat/index.php?Sayfa=sayfa&Tur=webmenu&Id=192 [Accessed 1 August 2014]

Republic of Turkey. The Ministry of Foreign Affairs (2014) *Economic Outlook of Turkey* [Online] Available from: http://www.mfa.gov.tr/prospects-and-recent-developments-in-the-turkish-economy.en.mfa [Accessed: 6 October 2015]

Republic of Turkey. The Ministry of Forestry and Water Affairs (2013) *Yukarı Havza Sel Kontrolü Eylem Planı 2013-2017 [Action Plan on Flood Control of Upstream Basins 2013-2017]*. Ankara: The Ministry of Forestry and Water Affairs.

Republic of Turkey. The Ministry of Forestry and Water Affairs (2014) *Geodata* [Online] Available from: http://geodata.ormansu.gov.tr/ [Accessed various time in 2014 and 2015]

Republic of Turkey. The Ministry of Forestry and Water Affairs (2014) *Ulusal Havza Yönetim Stratejisi (2014-2023) [The Strategy of National Basin Management (2014-2023)]*. Ankara: The Ministry of Forestry and Water Affairs.

Republic of Turkey. The Ministry of Forestry and Water Affairs (2015) *Prof. Dr. Veysel Eroğlu, Bakanlığın 2014 Yılı Faaliyetleri İle 2015-2019 Hedeflerine İlişkin Basın Toplantısı Düzenledi [Prof. Dr. Veysel Eroğlu set a meeting on the Ministry's activities of 2014 and target for the period between 2015 and 2019]* [Online] Available from: 2015 http://www.ormansu.gov.tr/osb/haberduyuru/guncelhaber/15-01-16/Prof_Dr_Veysel_Ero%C4%9Flu_Bakanl%C4%B1%C4%9F%C4%B1n_2014_Y%C4%B1l%C4%B1_Faaliyetleri_%C4%B0le_2015-2019_Hedeflerine_%C4%B0li%C5%9Fkin_Bas%C4%B1n_Toplant%C4%B1s%C4%B1_D%C3%BCzenledi%E2%80%A6.aspx?sflang=tr [Accessed: 6 October 2015]

Republic of Turkey. Turkish Statistics Institute (TurkStat). (2013) *Main Statistics* [Online] Available from: http://www.turkstat.gov.tr/UstMenu.do?metod=temelist [Accessed: 6 October 2015]

Republic of Turkey. Turkish Statistics Institute (TurkStat). (2014) *Demographic Statistics* [Online] Available from: http://www.tuik.gov.tr/UstMenu.do?metod=temelist [Accessed: 20 July 2014]

Robbins, P. (2012) *Political Ecology.* Sussex: Wiley-Blackwell.

Rodriguez-Labajos, B. and Martinez-Alier, J. (2015) Political ecology of water conflicts. *WIREs Water,* 2**,** 537-558

Roemer, J. E. (1996) *Theories of Distributive Justice.* Cambridge, MA and London: Harvard University Press.

Rogge, M. J. (2001) Human Rights, Human Development and the Right to A Healthy Environment: An Analytical Framework. *Canadian Journal of Development Studies,* 22**,** 33-50

Routledge, P. (2010) Introduction: Cities, Justice and Conflict. *Urban Studies,* 47**,** 1165-1177

Sabah. (1997) *Demirel'in Sevdası: GAP [Demirel's Desire: GAP]* [Online] Available from: http://arsiv.sabah.com.tr/1997/05/30/r11.html [Accessed: 15 February 2014]

Sabah. (2014) *Başbakan Artvin'den seslendi [The Prime Minister called from Artvin]* [Online] Available from: http://www.sabah.com.tr/gundem/2014/06/14/basbakan-Erdoğan-konusuyor [Accessed: 6 October 2015]

Sachs, J. (2005) *The End of Poverty: How Can We Make It Happen in Our Lifetime?* London: Penguin Books.

Sadd, J. L., Pastor, M., Morello-Frosch, R., Scoggins, J. and Jesdale, B. (2011) Playing It Safe: Assessing Cumulative Impact and Social Vulnerability through an Environmental Justice Screening Method in the South Coast Air Basin, California. *International Journal of Environmental Research and Public Health,* 8**,** 1441-1459

Sarantakos, S. (2005) *Social Research.* Basingstoke: Palgrave Macmillan.

Satterfield, T. A., Mertz, C. K. and Slovic, P. (2004) Discrimination, Vulnerability, and Justice in the Face of Risk. *Risk Analysis,* 24**,** 115-129

Scheffler, S. (2003) What is Egalitarianism? *Philosophy & Public Affairs,* 31**,** 287-337

Scheumann, W., Baumann, V., Mueller, A., Mutschler, D., Ismail, S. and Walenta, T. (2014) Sustainable Dam Development in Turkey: Between Europeanization and Authoritarian Governance. In Scheumann, W. and Hensengerth, O. (Eds.) *Evolution of Dam Policies: Evidence from the Big Hydropower States.* Heidelberg: Springer.

Scheumann, W., Kibaroğlu, A. and Kramer, A. (2011) Trajectories of Turkey's Water Policy. In Kibaroğlu, A., Scheumann, W. & Kramer, A. (Eds.) *Turkey's Water Policy: National Frameworks and International Cooperation.* Berlin, Heidelberg: Springer-Verlag.

Schlosberg, D. (2004) Reconceiving Environmental Justice: Global Movements and Political Theories. *Environmental Politics,* 13**,** 517-540

Schlosberg, D. (2005) Environmental and Ecological Justice: Theory and Practice in the United States. In Barry, J. and Eckersley, R. (Eds.) *The State and the Global Ecological Crisis.* Cambridge, Massachusetts and London: The MIT Press.

Schlosberg, D. (2007) *Defining environmental justice: theories, movements, and nature.* Oxford: Oxford University Press.

Schlosberg, D. (2013) Theorising environmental justice: the expanding sphere of a discourse. *Environmental Politics,* 22**,** 37-55

Schlosberg, D. and Carruthers, D. (2010) Indigenous Struggles, Environmental Justice, and Community Capabilities. *Global Environmental Politics,* 10**,** 12-35

Schlosberg, D. and Collins, L. B. (2014) From environmental to climate justice: climate change and the discourse of environmental justice. *WIREs Clim Change,* 5**,** 359-374

Schroeder, R., St.Martin, K., Wilson, B. and Sen, D. (2008) Third World Environmental Justice. *Society & Natural Resources: An International Journal,* 21**,** 547-555

Scoones, I. (1999) New Ecology and the Social Sciences: What Prospects for A Fruitful Engagement? *Annual Review of Anthropology,* 28**,** 479-507

Scoones, I., Leach, M. and Newell, P. (Eds.) (2015) *The Politics of Green Transformations.* London and New York: Earthscan.

Scoones, I., Newell, P. and Leach, M. (2015) The politics of green transformations. In Scoones, I., Leach, M. and Newell, P. (Eds.) *The Politics of Green Transformations.* London and New York: Earthscan.

Scott, J. C. (1998) *Seeing like a state: how certain schemes to improve the human condition have failed.* New Haven and London: Yale University Press.

Şekercioğlu, C. H., Anderson, S., Akçay, E., Bilgin, R., Can, O. E., Semiz, G., Tavşanoğlu, C., Yokes, M. B., Soyumert, A., İpekdal, K., Sağlam, I. K., Yücel, M. and Dalfes, H. N. (2011) Turkey's globally important biodiversity in crisis. *Biological Conservation,* 144**,** 2752-2769

Sen, A. (2009) *The Idea of Justice.* London: Penguin Books.

Sen, A. and Williams, B. (Eds.) (1982) *Utilitarianism and beyond.* Cambridge: Cambridge University Press.

Şen, Z. (2011) Water for Energy: Hydropower is Vital for Turkey. In Kibaroğlu, A., Scheumann, W. and Kramer, A. (Eds.) *Turkey's Water Policy: National Frameworks and International Cooperation.* Berlin, Heidelberg: Springer-Verlag.

Shambayati, H. (1994) The Rentier State, Interest Groups, and the Paradox of Autonomy: State and Business in Turkey and Iran. *Comparative Politics,* 26**,** 307-331

Shilling, F. M., London, J. K. and Lievanos, R. S. (2009) Marginalization by collaboration: Environmental justice as a third party in and beyond CALFED. *Environmental Science & Policy,* 12**,** 694-709

Shmueli, D. F. (2008) Environmental justice in the Israeli context. *Environment and Planning A,* 40**,** 2384-2401

Shrader-Frechette, K. S. (2002) *Environmental Justice: Creating Equality, Reclaiming Democracy.* Oxford: Oxford University Press.

Sibley, D. (2003) Psychogeographies of rural space and practices of exclusion. In Cloke, P. (Ed.) *Country Visions.* China: Pearson Education Limited.

Simmons, P. and Walker, G. (2004) Living with Technological Risk: Industrial Encroachment on Sense of Place. In Boholm, A. and Lofstedt, R. (Eds.) *Facility Siting: Risk, Power and Identity in Land Use Planning.* London and Sterling, VA: Earthscan Publications LTD.

Şirin, S. M. and Ege, A. (2012) Overcoming problems in Turkey's renewable energy policy: How can EU contribute? *Renewable and Sustainable Energy Reviews,* 16**,** 4917-4926

Smith, D. M. (1994) *Geography and Social Justice.* Oxford and Cambridge, MA: Blackwell.

Smith, K. (2013) *Environmental Hazards: Assessing risk and reducing disaster.* London and New York: Routledge.

Smith, N. (2008) *Uneven Development: Nature, Capital, and the Production of Space.,* Athens, Georgia, USA: The University of Georgia Press.

Smith, P. D. and McDonough, M. H. (2001) Beyond Public Participation: Fairness in Natural Decision Making. *Society & Natural Resources: An International Journal,* 14**,** 239-249

Sneddon, C. (2013) Water, governance ang hegemony. In Harris, L. M., Goldin, Jacqueline A. and Sneddon, C. (Ed.) *Contemporary Water Governance in the Global South: Scarcity, marketization and participation.* Oxon: Earthscan.

Solitare, L. (2005) Prerequisite conditions for meaningful participation in brownfields redevelopment. *Journal of Environmental Planning and Management,* 48**,** 917-935

Stark, C. A. (2000) Hypothetical Consent and Justification. *The Journal of Philosophy,* 97**,** 313-334

Strauss, A. L. and Corbin, J. M. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory.* Thousand Oaks: Sage Publications.

Stretesky, P. and Hogan, M. J. (1998) Environmental Justice: An Analysis of Superfund Sites in Florida. *Social Problems,* 45**,** 268-287

Sümer, V. (2011) *The European Union Water Framework Directive and Turkey's Water Management Policy: An Analysis*. Unpublished PhD Thesis. Middle East Technical University.

Svendsen, M. and Nott, G. (2000) Irrigation Management Transfer in Turkey: Process and Outcomes. In Groenfeldt, D. and Svendsen, M. (Eds.) *Case Studies in Participatory Irrigation Management.* Washington, D.C.:The World Bank Institute.

Swyngedouw, E. (1999) Modernity and Hybridity: Nature, Regeneracionismo and the Production of the Spanish Waterscape, 1890-1930. *Annals of the Association of American Geographers,* 89**,** 443-465

Swyngedouw, E. (2007) Technonatural revolutions: the scalar politics of Franco's hydro-social dream for Spain, 1939-1975. *Transactions of the Institute of British Geographers,* 32**,** 9-28

Swyngedouw, E. (2009) The Political Economy and Political Ecology of the Hydro-Social Cycle. *Journal of Contemporary Water Research & Education,* August**,** 56-60

Swyngedouw, E. (2013) Into the Sea: Desalination as Hydro-Social Fix in Spain. *Annals of the Association of American Geographers,* 103**,** 261-270

Swyngedouw, E. and Heynen, N. C. (2003) Urban Political Ecology, Justice and the Politics of Scale. *Antipode,* 35**,** 888-917

Syme, G. J., Nancarrow, B. E. and McCreddin, J. A. (1999) Defining the components of fairness in the allocation of water to environmental and human uses. *Journal of Environmental Management,* 57**,** 51-70

Szasz, A. (1994) *EcoPopulism: toxic waste and the movement for environmental justice.* Minneapolis: University of Minnesota Press.

Szasz, A. and Meuser, M. (1997) Environmental Inequalities: Literature Review and Proposals for New Directions in Research and Theory. *Current Sociology,* 45**,** 99-120

Sze, J. (2007) *Noxious New York: the racial politics of urban health and environmental justice.* Cambridge, MA: The MIT Press.

Sze, J. and London, J. K. (2008) Environmental Justice at the Crossroads. *Sociology Compass,* 2 1331-1354

T24. (2014) *Barajlar Kongresi ve HES Fuari'ni protesto edenlere polis mudahele etti [The Police intervened in the crowd protesting Dam Congress and HPP Fair]* [Online] Available from: http://t24.com.tr/haber/barajlar-kongresi-protestolarina-polis-mudahale-etti,251007 [Accessed 27 July 2014]

Thibaut, J., Walker, L., LaTour, S. and Houlden, P. (1974) Procedural Justice as Fairness. *Stanford Law Review,* 26**,** 1271-1290

Thomas, D. R. (2006) A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation,* 27**,** 237-246

Tiğrek, S. and Kibaroğlu, A. (2011) Strategic Role of Water Resources for Turkey. In Kibaroğlu, A., Scheumann, W. and Kramer, A. (Eds.) *Turkey's Water Policy: National Frameworks and International Cooperation.* Berlin Heidelberg: Springer-Verlag.

Torres, G. (1994) Environmental burdens and democratic justice. *Fordham Urban Law Journal,* 21**,** 431-460

Transparency International. (2015) *Corruption by country* [Online] Available from: http://www.transparency.org/country [Accessed: 21 August 2015]

Tschakert, P. (2009) Digging Deep for Justice: A Radical Re-imagination of the Artisanal Gold Mining Sector in Ghana. *Antipode,* 41**,** 706-740

Tsosie, R. A. (2007) Indegenous People and Environmental Justice: The Impact of Climate Change. *University of Colorado Law Review,* 78**,** 1625-1677

Turan, N. (2013) The Strait, The Beach, and The Highway: Shifting Edges of İstanbul. In Pyla, P. (Ed.) *Landscapes of Development: The impact of modernization discourses on the physical environment of the Eastern Mediterranean.* Cambridge, MA: The Aga Khan Program.

Turhan, E. (2014) *The political ecology of state-led climate change adaptation: A Study of Labour-Intensive Agriculture From Turkey*. Unpublished PhD Thesis. Universitat Autonoma de Barcelona.

Tür, Ö. (2011) Economic Relations with the Middle East Under the AKP-Trade, Business Community and Reintegration with Neighboring Zones. *Turkish Studies*, 12 (4), 589-602

Tyler, T. R. (1990) *Why people obey the law.* New Haven:Yale University Press.

Tyler, T. R. and Caine, A. (1981) The Influence of Outcomes and Procedures on Satisfaction With Formal Leaders. *Journal of Personality and Social Psychology,* 41**,** 642-655

Tyler, T. R. and Smith, H. J.:(1995) Social Justice and Social Movements. *Working Paper Series.* Institute for Reseach on Labor and Employment, UC Berkeley.

Uğur, I., Denizlioğlu, H., Salim, S., Uslu, H., Toprak, T., Kiraz, S. and Aslan, A. (2013) *Muğla 2012 Çevre Durum Raporu [Muğla 2012 Report on Environment]*. Muğla, Turkey: The Governorship of Muğla.

Union of Chambers of Turkish Engineers and Architects (*Türkiye Mühendis ve Mimar Odaları Birliği*, TMMOB). (2011) *TMMOB Hidroelektrik Santraller Raporu [Turkish Union of Chambers of Engineers and Architects' Report of Hydroelectric Power Plants]*. Ankara: TMMOB.

United States Environmental Protection Agency (US EPA). (1998) *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses*. Washington,DC: US Environmental Protection Agency.

United States Environmental Protection Agency (US EPA). (2013) *Basic Information* [Online] Available from: http://www.epa.gov/environmentaljustice/basics/ejbackground.html [Accessed 1 February 2013]

Urkidi, L. and Walter, M. (2011) Dimensions of environmental justice in anti-gold mining movements in Latin America. *Geoforum,* 42**,** 683-695

Van Parijs, P. (2009) Egalitarian Justice, Left-Libertarianism and the Market. In De Wijze, S., Kramer, M. H. and Carter, I. (Eds.) *Hillel Steiner and the Anatomy of Justice: Themes and Challenges.* New York: Routledge.

Vermeylen, S. and Walker, G. (2011) Environmental Justice, Values, and Biological Diversity: The San and the Hoodia Benefit-Sharing Agreement. In Carmin, J. and Agyeman, J. (Eds.) *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices.* Cambridge, MA and London: The MIT Press.

Wacquant, L. (2007) Territorial stigmatization in the age of advanced marginality. *Thesis Eleven,* 91**,** 66-77

Walker, G. (2009) Beyond Distribution and Proximity: Exploring the Multiple Spatialities of Environmental Justice. *Antipode,* 41**,** 614-36

Walker, G. (2012) *Environmental Justice: Concept, Evidence and Politics.* London and New York: Routledge.

Walker, G. and Bulkeley, H. (2006) Editorial: Gepgraphies of Environmental Justice. *Geoforum,* 37**,** 655-659

Walker, G. and Burningham, K. (2011) Flood risk, vulnerability and environmental justice: Evidence and evaluation of inequality in a UK context. *Critical Social Policy,* 31**,** 216-240

Walker, G. and Day, R. (2012) Fuel poverty as injustice: Integrating distribution, recognition and procedure in the struggle for affordable warmth. *Energy Policy,* 49**,** 69-75

Walker, L., Lind, E. A. and Thibaut, J. (1979) The relation between procedural and distributive justice. *Virgina Law Review,* 65**,** 1401-1420

Warner, J. (2008) Contested Hydrohegemony: Hydraulic Control and Security in Turkey. *Water Alternatives,* 1**,** 271-288

Watts, M. (2000) Political Ecology. In Sheppard, E. and Barnes, T. J. (Eds.) *A Companion to Economic Geography.* Malden, MA, USA; Oxford and Carlton, Australia:Wiley-Blackwell.

Weinberg, A. S. (1998) The Environmental Justice Debate: A Commentary on Methodological Issues and Practical Concerns. *Sociological Forum,* 13**,** 25-32

Winter, M. (1996) *Rural Politics: Policies for agriculture, forestry and the environment,* London and New York, Routledge.

Wisner, B., Blaikie, P., Cannon, T. and Davis, I. (2004) *At Risk: Natural hazards, people's vulnerability and disasters.* London and New York: Routledge.

Wissenburg, M. (2006) Liberalism. In Dobson, A. N. H. & Eckersley, R. (Eds.) *Political Theory and the Ecological Challenge.* Cambridge: Cambridge University Press.

Wissenburg, M. (2011) The lion and the lamb: ecological implications of Martha Nussbaum's animal ethics. *Environmental Politics,* 20**,** 391-409

Wolch, J. R., Byrne, J. and Newell, J. P. (2014) Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning,* 125**,** 234-244

Wolff, J. (1998) Fairness, Respect, and the Egalitarian Ethos. *Philosophy & Public Affairs,* 27**,** 97-122

Wolff, J. (2006) Libertarianism, Utility, and Economic Competition. *Virgina Law Review,* 92**,** 1605-1623

Wolff, J. (2010) Fairness, Respect and the Egalitarian *Ethos* Revisited. *J Ethics,* 14**,** 335-350

Woods, M. (2003) Deconstructing rural protest: the emergence of a new social movement. *Journal of Rural Studies,* 19**,** 309-325

Woods, M. (2005) *Rural Geography,* London, Thousand Oaks and New Delhi, SAGE Publications.

Woods, M. (2009) Rural geography: blurring boundaries and making connections. *Progress in Human Geography,* 1-10

Woods, M. (2013) Regions Engaging Globalization: A Typology of Regional Responses in Rural Europe. *Journal of Rural and Community Development,* 8**,** 113-126

World Commission on Dams (WCD). (2000) *Dams and Development*. London: World Commission on Dams.

Yavuz, F. (2005) *Türkiye'de Tarım [Agriculture in Turkey]*. Ankara: The Ministry of Agriculture and Rural Affairs.

Yeğen, M. (2007) Turkish nationalism and the Kurdish question. *Ethnic and Racial Studies,* 30**,** 119-151

Yeldan, E. (2006) Neoliberal Global Remedies: From Speculative-Led Growth to IMF-Led Crisis in Turkey. *Review of Radical Political Economics,* 38 (2), 193-213

Yılmaz, D. G. (2014) Adaptation of Rural Communities and Understanding their Socio-economic Vulnerability for Future. *Procedia Economics and Finance,* 18**,** 536-543

Yin, R. K. (1994) *Case Study Research: Design and Methods (Second Edition).* Thousand Oaks, California: SAGE Publications Inc.

Young, I. M. (1990) *Justice and Politics of Difference.* Princeton, New Jersey: Princeton University Press.

Young, I. M. (2002) *Inclusion and Democracy.* Oxford: Oxford University Press.

Yüksek, O., Kömürcü, M. I., Yüksel, I. and Kaygusuz, K. (2006) The role of hydropower in meeting Turkey's electric energy demand. *Energy Policy,* 34**,** 3093-3103

Yüksel, I. (2008) Hydropower in Turkey for a clean and sustainable energy future. *Renewable and Sustainable Energy Reviews,* 12**,** 1622-1640

Zarfl, C., Lumsdon, A. E., Berlekamp, J., Tydecks, L. and TÖÇKner, K. (2015) A global boom in hydropower dam construction. *Aquatic Sciences,* 77**,** 161-170

Zeitoun, M. and Allan, J. A. (2008) Applying hegemony and power theory to transboundary water analysis. *Water Policy,* 10**,** 3-12

Zimmerman, R. (1993) Issues of classification in environmental equity: How we manage is how we measure. *Fordham Urban Law Journal*, 21**,** 633-669

Zürcher, E.-J. (2004) *Turkey: A Modern History*. London and New York: I.B. Tauris.

## APPENDIX I- LIST OF PRIMARY SOURCES

### Legislation

*Büyükşehir Belediyesi Kanunu 2004* [2004 Law on the Metropolitan Municipality] (No. 5216). Ankara: Turkish Grand National Assembly

*Çevre Etki Değerlendirmesi Yönetmeliği 2003* [2003 By-law on Environmental Impact Assessment] (Official Gazette No. 25318). Ankara: Turkish Grand National Assembly

*Çevre Etki Değerlendirmesi Yönetmeliği 2008* [2008 By-law on Environmental Impact Assessment] (Official Gazette No. 26939). Ankara: Turkish Grand National Assembly

*Çevre Etki Değerlendirmesi Yönetmeliği 2013* [2013 By-law on Environmental Impact Assessment] (Official Gazette No. 28784). Ankara: Turkish Grand National Assembly

*Çevre Etki Değerlendirmesi Yönetmeliği 2014* [2014 By-law on Environmental Impact Assessment] (Official Gazette No. 29186). Ankara: Turkish Grand National Assembly

*Çevre Kanunu 1983* [1983 Law on the Environment] (No. 2872). Ankara: Turkish Grand National Assembly

*Elektrik Piyasası Kanunu 2001* [2001 Law on Electricity Market] (No. 4628). Ankara: Turkish Grand National Assembly

*Elektrik Piyasasında Üretim Faaliyetinde Bulunmak Üzere Su Kullanım Hakkı Anlaşması İmzalanmasına İlişkin Usül ve Esaslar Hakkında Yönetmelik 2003* [2003 By-law on Principles and Practices on Signing the Water Use Right Agreements for Electricity Production in the Electricity Market] (Official Gazette No. 25150). Ankara: Turkish Grand National Assembly

*İskan Kanunu 2006* [2006 Law on Resettlement] (No. 5543). Ankara: Turkish Grand National Assembly

*Kamulaştırma Kanunu 1983* [1983 Law on Expropriation] (No. 2942). Ankara: Turkish Grand National Assembly

*Milli Parklar Kanunu 1983* [1983 Law on the National Parks] (No. 2873). Ankara: Turkish Grand National Assembly

*Orman Kanunu 1956* [1956 Law on Forestry] (No. 6831). Ankara: Turkish Grand National Assembly

*Yenilenebilir Enerji Kaynaklarının Elektrik Enerjisi Üretimi Amaçlı Kullanımına İlişkin Kanun 2005* [2005 Law on the Utilisation of Renewable Energy Sources for the Purpose of Electrical Energy Production] (No. 5346). Ankara: Turkish Grand National Assembly

**Cases**

*Akat, M.; Yorulmaz, M.; Arslan, D.; Daşgın, M.; Yıldırım, İ.; Sıkkın, C. and Babaoğlu Ulutas, B. v The Governorship of Muğla* [2011], 1st Administrative Court of Muğla [2011] 2011/1011

*Sarı, L.; Akça, T. and Polat, M. v The Directorate General of State Hydraulic Works* [2012], 1st Administrative Court of Muğla [2010] 2010/2739

*Yılmaz, I.; Şahin, İ., Directorate of Yanıklar Irrigation Association; Sarı, M. and Çatak, M. v The Governorship of Muğla* [2011], The Council of State (13th Department) [2011] 2011/1011

*Yılmaz, I.; Şahin, I., Directorate of Yanıklar Irrigation Association; Sarı, M. and Çatak, M. v The Governorship of Muğla* [2013], The Council of State (14th Department) [2012] 2012/2197

*Yılmaz, I.; Şahin, I., Directorate of Yanıklar Irrigation Association; Sarı, M. and Çatak, M. v The Governorship of Muğla* [2014], 1st Administrative Court of Muğla [2014] 2014/1307

**Supplementary Official/Legal Documents**

Bayraktar, E., 2013. *İstanbul Milletvekili Sedef KÜÇÜK'un Yazılı Soru Önergesi* [Parliamentary Inquiry of Sedef KÜÇÜK, MP of İstanbul], December 17. The Ministry of Environment and Urbanisation, Directorate of Strategic Planning: Ankara

Committee of Protection of Cultural and National Assets 2003. *Karar* [Decision] (No. 2588), August 19. Muğla: Committee of Protection of Cultural and National Assets.

Demir, N. 2011 *Petition for Parliamentary Inquiry*. Ankara: The Deputy Presidency of Republican People's Party of Turkish Grand National Assembly.

DSİ 2006. *Yuvarlakçay Hidroelektrik Enerji Üretim Tesisinin Su Kullanım Hakkı ve İşletme Esaslarına İlişkin Anlaşma* [Water Use Right Agreement to Establish Yuvarlakçay HPP], April 21. Devlet Su İşleri: Ankara.

DSİ 2007. *Erikoğlu-Keserali HES Su Kullanım Anlaşması* [Water Use Right Agreement of Erikoğlu-Keserali HPP], December 5. Devlet Su İşleri: Ankara.

DSİ General Directorate of XXI. Region 2009. *Vatandaşların talep ve şikayetleri* [Demands and complaints of citizens] *(No. B.18.1.DSİ.1.21.01.00-622.01-84336)*. Aydın: DSİ General Directorate of XXI. Region.

Gold Standard, 2010. *Sekiyaka Hidro Elektrik Santrali Gold Standard Yerel Halk Bilgilendirme Raporu* [Gold Standard Local Stakeholder Consultation Report].

Öngür, T., 2011. *Burgular-Gebeş Regülator ve HES Projesi'nin ve ÇED Raporunun Eleştirisi* [The Critique of Burgular-Gebeş HPP and Its EIA Report].

Sarıca, B. (ed), no date. *Özel Çevre Koruma Kurulu Başkanlığı'na Dilekçe ve Bilirkişi Raporu* [Petition to the Directorate General of Special Environment Protection Agency and Submission of Expert Report].

**Social Media**

Çevre Direnişi Atlası [Atlas of Environmental Resistance] (in collaboration with EJOLT Project) Facebook Page

Ekoloji Kolektifi [The Collective of Ecology] Facebook Page

Fethiye-Saklıkent Koruma Platformu [Fethiye-Saklıkent Protection Platform] Facebook Page

**Software**

The Ministry of Forestry and Water Affairs (2014) *GeoData* [Online GIS Database] Available at http://geodata.ormansu.gov.tr/ (Accessed various times in 2014)

## APPENDIX II- LIST OF INTERVIEWEES

**Semi-Structured Interviews (Interviewee Number, Occupation, Gender, Interview Place and Interview Date)**

**NGOs-Legal Consultants-Environmental Activists (Local and National)**

Interviewee 1, Nature Association, Female, Ankara, 2012

Interviewee 9, Fethiye Chamber of Commerce and Industry, Male, Fethiye-Muğla, 2014

Interviewee 11, Environmental activist-local journalist, Male, Fethiye-Muğla, 2014

Interviewee 12, Lawyer, Female, Dalyan-Muğla, 2014

Interviewee 13, Lawyer, Male, Fethiye-Muğla, 2014

Interviewee 14, Representative of Muğla Bar in Fethiye, Male, Fethiye-Muğla, 2014

Interviewee 22, Environmental activist, Male, Fethiye-Muğla, 2014

Interviewee 26, The Turkish Foundation for Combating Soil Erosion for Reforestation and the Protection of Natural Habitats (Fethiye Branch), Male, Fethiye-Muğla, 2014

Interviewee 27, Chamber of Architects of Turkey (Fethiye Branch), Female, 2014

Interviewee 30, Greenpeace Mediterranean (Turkey), Male, İstanbul, 2012 (by the time of interview, he changed his institution afterwards)

Interviewee 35, Environmental activist, Male, Fethiye-Muğla, 2014

**DSİ (Local and National)**

Interviewee 6, Engineer in DSİ Fethiye Branch, Male, Fethiye-Muğla, 2014

Interviewee 28, Engineer in DSİ Fethiye Branch, Male, Fethiye-Muğla, 2014

Interviewee 29, DSİ Headquarters (Department of Monitoring), Male, Ankara, 2014

Interviewee 32, DSİ Headquarters (Department of Survey and Planning), Male, Ankara, 2014

**Members of Parliament**

Interviewee 5, Member of Parliament (İstanbul), Female, Ankara, 2012

Interviewee 36, Member of Parliament (Muğla), Male, Fethiye-Muğla, 2014

**Private Sector**

Interviewee 31, (Former) Director General of AKFEN Holding, Male, Ankara, 2014

Interviewee 33, Head of an Energy and Consultancy Company (Former high-ranked official in DSİ), Male, Ankara, 2014

**Local Administrators**

Interviewee 3, Head of Aklar Village (*mukhtar*), Male, Aklar-Muğla, 2014

Interviewee 7, Consultant to the President of Fethiye Municipality (and former DSİ official), Male, Fethiye-Muğla, 2014

Interviewee 37 (and his wife), Head of Kargı Village (*mukhtar*), Male, Kargı-Muğla, 2014

Interviewee 39, (Former) President of Köyceğiz Municipality, Male, Köyceğiz-Muğla, 2014

**Locals**

**Kargı-Yanıklar**

Interviewee 2 (with his wife), Tourism Sector, Male, Yanıklar-Muğla, 2014

Interviewee 17, Tourism Sector, Male, Yanıklar-Muğla, 2014

Interviewee 21, Local (Lecturer), Female, Yanıklar-Muğla, 2014

Interviewee 23, Emigrant, Male, Yanıklar-Muğla, 2014

Interviewee 24 (with two of her female friends), Housewife-farmer, Female, Yanıklar-Muğla, 2014

Interviewee 25, Local (Student), Male, Yanıklar-Muğla, 2014

Interviewee 38, Seasonal Worker, Male, Yanıklar-Muğla, 2014

**Yuvarlakçay**

Interviewee 4, Farmer, Male, Pınarköy-Muğla, 2014

Interviewee 8, Tourist guide, Male, Dalyan-Muğla, 2014

Interviewee 10, Restaurant owner, Male, Pınarköy-Muğla, 2014

Interviewee 15, Emigrant, Male, Dalyan-Muğla, 2014

Interviewee 16, Farmer, Female, Pınarköy-Muğla, 2014

Interviewee 18, Farmer, Female, Pınarköy-Muğla, 2014

Interviewee 19, Shopkeeper, Male, Dalyan-Muğla, 2014

Interviewee 20, Student-Restaurant worker, Male, Pınarköy-Muğla, 2014

**Other**

Interviewee 40, (Retired) Civil servant in the General Directorate of Special Environment Protection Areas, Female, Ankara, 2014

**Group Interviews (Occupation, Gender, Interview Place and Interview Date)**

**Group Interview 1 (Saklıkent HPP)**

Farmer, Male, Çukurincir-Muğla, 2014

Farmer, Male, Çukurincir-Muğla, 2014

**Group Interview 2 (Saklıkent HPP)**

Farmer, Male, Demirler-Muğla, 2014

Farmer, Male, Demirler-Muğla, 2014

Farmer, Male, Demirler-Muğla, 2014

Farmer, Male, Bogalar-Muğla, 2014

**Group Interview 3 (Saklıkent HPP)**

Farmer, Male, Eşen-Muğla, 2014

Farmer, Male, Eşen-Muğla, 2014

Barber, Male, Eşen-Muğla, 2014

**Group Interview 4 (Saklıkent HPP- 2 sessions)**

Farmer, Male, Palamut-Muğla, 2014

Farmer, Male, Palamut-Muğla, 2014

Farmer, Male, Palamut-Muğla, 2014

Farmer, Male, Palamut-Muğla, 2014

Retired civil servant, Male, Palamut-Muğla, 2014

**Group Interview 5 (Söğütlüdere HPP)**

Farmer, Male, Söğütlüdere-Muğla, 2014

Farmer, Male, Söğütlüdere-Muğla, 2014

Farmer, Male, Söğütlüdere-Muğla, 2014

Farmer, Male, Söğütlüdere-Muğla, 2014

Farmer, Male, Söğütlüdere-Muğla, 2014

Farmer, Male, Söğütlüdere-Muğla, 2014

Shopkeeper, Male, Söğütlüdere-Muğla, 2014

**Group Interview 6 (Söğütlüdere HPP)**

Farmer, Male, Çayan-Muğla, 2014

Farmer, Male, Çayan-Muğla, 2014

Farmer, Male, Çayan-Muğla, 2014

**Group Interview 7 (DSİ Headquarters)**

Head of Department of Dams and HPPs, Male, Ankara, 2014

Deputy Head of Department of Dams and HPPs, Male, Ankara, 2014

**Group Interview 8 (NGO)**

Representative of Chamber of Environmental Engineers of Turkey, Male, Ankara, 2012

Representative of Chamber of Environmental Engineers of Turkey, Male, Ankara, 2012

**Unused Interview**

Interviewee 34, University student, Male, Fethiye-Muğla, 2014

## APPENDIX III- LIST OF INTERVIEW QUESTIONS

### Classification of Interview Questions

| Issue Considered | Numerical Code |
|---|---|
| Perception of Water | 1 |
| Distributional Environmental Justice | 2 |
| Recognitional Environmental Justice | 3 |
| Procedural Environmental Justice | 4 |
| Social Relations/Structures | 5 |
| Nature/Society Relations | 6 |
| General/Discussion | 7 |
| All Justice Dimensions | 8 |

**These numbers indicate categories, which the question is mainly related to. Then, in the very end of this part, it will be depicted in another table, wrapping up how it is seen in general.**

### Questions for Lawyers and Legal Experts

**1-** Can you please describe me what 'water' means to you? (1), (6)
**2-** How is the HPP process operated in Turkey? (4), (8)
**3-** To what extent are socio-economic and ecological differences taken into consideration in the HPP process? (3)
**4-** What are the responsibilities of private sector, state and locals in the HPP process? (5), (7), (8)
**5-** What are the impacts of HPPs on property rights? (4)
**6-** Can you please explain the appropriation process at the local scale during the HPP process? (8)
**7-** How did EIA process work in this region in the HPP process? (4)
**8-** How were reactions of locals against HPP development of the region? (5), (8)
**9-** Depending on your own experiences in the region, what are the reasons leading locals to give their consent for HPP development? What were the issues experienced in this process, where locals granted their consent for constructions? (5), (6), (8)
**10-** Depending on your own experiences in the region, what are the reasons triggering public oppositions against HPPs in this region? What were the issues experienced in this process, where locals opposed to constructions? (5), (6), (8)
**11-** How does the litigation process work? (4)
**12-** How do you access to data required to support your legal struggles? Is there any obstacle to obtain them? (4)
**13-** To what extent are court decisions implemented? (4)
**14-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)
**15-** As lawyers, what do you expect from other stakeholders such as private sector, state institutions, locals, media, academics and NGOs in the HPP process? (5)

**Questions for Representatives of Private Sector (if possible, the ones operating in the field areas)**

**1-** Can you please describe me what 'water' means to you? (1), (6)
**2-** What is your opinion on Turkey's recent environmental and water policies? (7), (8)
**3-** To what extent did you (private sector) participate in the policy process? (3), (4)
**4-** What are the advantages and disadvantages of HPPs in Turkey? (2)
**5-** Can you describe me the procedures you are supposed to follow in the HPP process (from licensing to operation)? (4), (8)
**6-** What are the advantages that HPP sector provides to you in general? (7)
**7-** What are the main roles and responsibilities of the companies in the HPP process? (5), (7), (8)
**8-** What kind of experiences did your company have with public at the HPP localities? As a result of the process, what kind of relations have you developed with locals? (5), (8)
**9-** In general, what do you think about public oppositions against HPP constructions in Turkey? (7), (8)
**10-** Do you use the electricity generated in your HPPs at the field, or do you send it to the central grid? **(Yes/No question, answer is important, but I do not think that it will take much time to answer this) (2)**
**11-** What do you think about social science involvement to the water politics and water business? **(Or, it can be restated as follows: do you have any interactions with social scientists and ecologists in general, when you are developing any hydro-engineering project?) (3)**
**12-** How do you use water use right agreements in the HPP process? Is it restricting local access to water? (4)
**13-** Have you faced with any court case due to HPP constructions? If yes, how was this process? (4)
**14-** What is the role of foreign investors in Turkey's HPP process? How do you evaluate foreign investments in Turkey's HPP process? (7) **(Might be skipped, depending on availability)**
**15-** In your opinion, what should an ideal HPP process include in Turkey? (5), (8)
**16-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)
**17-** As private sector, what do you expect from other stakeholders such as lawyers, state institutions, locals, media, academics and NGOs in the HPP process? (5)

**Questions to NGO representatives (Local-National)**

**1-** Can you describe me what 'water' means in your own words? (1), (6)
**2-** What is your organisation's stance on the HPP process of Turkey? (7), (8)
**3-** Can you tell me how HPP process is operated here, from project planning to operation phase? (4), (8)
**4-** What are the roles and responsibilities of NGOs in the HPP process? (5), (7), (8)
**5-** How do you contribute to the HPP process, when policies and projects are prepared? Is there any invitation by companies and/or state for consultation? (4)
**6-** How did you engage in this HPP process here? Depending on your own experiences, what are the main highlights of your relations with state, companies and locals? (5), (8)
**7-** Can you explain how public reactions (either consent or opposition) are shaped in the HPP process? What were the main reasons?**(To be asked in this form to the national NGO people while to be asked differently by referring to localities to the local NGO people) (8)**
**8-** How do you evaluate public participation to the HPP process? (4)
**9-** What is your opinion on EIA process? (4)
**10-** To what extent are the needs of people, especially vulnerable groups and minorities, and nature taken into consideration in the HPP process? (3)
**11-** How have HPPs changed socio-ecological conditions here, even in cases resulting in non-implementation? (2)
**12-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)
**13-** As NGO representatives, what do you expect from stakeholders such as lawyers, state institutions, locals, media, academics and private sector in the HPP process? (5)

**Bonus Questions, depending on interview time:** Have you developed relations with the other NGOs in this HPP process? Can I mention about a consensus among the environmental NGOs of this region on the HPP issue? Are you in touch with national environmental NGOs and local ones from the other regions? Have you used your experiences on this issue in other areas and regions in Turkey? What are the method you use to publicise your work? Do you find them enough?

**Questions for Locals**

**1-** What does 'water' mean to you? (1), (6)
**2-** What is water's role in your culture and daily life? (1), (3), (6)
**3-** What do you think about HPP constructions in your region? (7), (8)
**4-** How did HPPs contribute to/damage your life, environment and economic activities? (2), (6)
**5-** How was water usage in your region before HPP issues? Did you experience any changes due to HPPs? (2)
**6-** Can you tell me how appropriation process was here? Were you directly affected in the appropriation process? (3), (4)

**7-** Do you think whether socio-economic and environmental peculiarities and necessities of your region were taken into consideration in the HPP process? How? (3)
**8-** How was HPP process operated in your region? (4), (8)
**9-** How did you participate in the HPP process in your region? Why? **(Different form: If there was a public meeting under EIA process, did you participate in it, and what happened in that meeting?) (3), (4)**
**10-** How did you (locals) react to the HPPs here? (Follow-ups if not addressed in the response: Have they (company and state) tried to negotiate with you? Which methods did you use to protest? How was the participation level to the protests?) (4), (7)
**11-** How was your relation with company and state in this opinion formation process? How was their approach? (5)
**12-** Have you shared your HPP experience with people having similar issues with you around the region? (7), (8)
**13-** (If the case involves) What is your opinion about the litigation process? (4)
**14-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)
**15-** As locals, what do you expect from other stakeholders such as lawyers, state institutions, NGOs, media, academics and private sector in the HPP process? (5)

**Question for State Hydraulic Works (DSI) and relevant state departments**

**1-** What does 'water' mean to you? (1), (6)
**2-** Can you briefly tell me advantages and disadvantages of HPPs and other hydro-engineering projects? (2)
**3-** Can you explain me the HPP process from planning to implementation? (4), (8)
**4-** What are the roles and responsibilities of DSI (or other state departments, depending on the context) in this process? (5), (7), (8)
**5-** What are the criteria that you take into consideration, when you initiate the HPP process and feasibility studies? (2), (6)
**6-** What happens to the electricity generated in HPPs? Is it locally used, or is it sent to central grid? How does DSI manage the distribution of hydro-electricity? **(2)**
**7-** How does DSI conduct the monitoring process? Is there any difficulties you are experiencing in this process? (4)
**8-** To what extent does DSI collaborate with social scientists? (3)
**9-** Do you find the legal framework of HPPs as sufficient? (7)
**10-** What is your opinion about HPP opponents/protesters? Is there anything that you agree with them? (3), (4), (5)
**11-** In the cases, where litigation process involved, how do you contribute to the litigation process? (4)
**12-** To what extent do other stakeholders (academics, locals, media, companies, other state institutions, NGOs etc.) participate in HPP process and DSI's activities? (3), (4)
**13-** In your opinion, what are the roles and responsibilities of such stakeholders in water management of Turkey? (5)

**14-** Do you foresee any potential change in HPP policies of Turkey in near future? (7)

**15-** In your opinion, what should an ideal HPP process include in Turkey? **(To be asked depending on the general tone of the interviewee. If s/he finds HPP framework and activities sufficient and beneficial, it will be assumed that for her/him, the current is the ideal process.) (5), (8)**

**Questions for the Local Branches of the State Institutions and/or Local Administrators**

**1-** Can you please describe me what 'water' means in your own words? (1), (6)

**2-** What are the advantages and disadvantages of HPPs in Turkey? (2)

**3-** Can you please tell me the process of HPP in your region? What is the role of your institution in this process? (4), (5), (8)

**4-** What are the socio-economic, cultural and ecological changes HPPs have led in your region? (2)

**5-** In your opinion, to what extent are socio-economic, cultural and ecological differences/peculiarities taken into consideration in the HPP process of your region? (3)

**6-** How did people react to HPPs in your region? (8)

**7-** In the cases of public opposition, what did they demand? (5), (7)

**8-** To what extent do locals and other stakeholders participate in the HPP process? (4)

**9-** What do you expect from other stakeholders such as lawyers, other state institutions, locals, NGOs, media, academics and private sector in the HPP process? (5)

**10-** In the cases involving litigation process, what is your institution's position? How do you take part in this process? (4)

**11-** In your opinion, what should an ideal HPP process include in Turkey? (5), (8)

**12-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)

**Questions for Academics**

**1-** Can you please describe me what 'water' means in your own words? (1), (6)

**2-** How do you evaluate Turkey's water management policies? (7), (8)

**3-** Do you find Turkey's energy market reforms sufficient? If not, how can they be improved? (7)

**4-** What are the advantages and disadvantages of HPPs in Turkey? (2)

**5-** Can you describe me how the HPP process is in Turkey? (4), (8)

**6-** Generally, to what extent are socio-economic, cultural and ecological differences/peculiarities taken into consideration when the HPPs are implemented in Turkey? (3)

**7-** What do you think about locals' reactions to the HPPs, either protest or consent? What are main reasons pushing them to react in these ways? (5), (7), (8)

**8-** What are the roles of academics in the HPP process? (5),(7), (8)

**9-** Do you foresee any changes in Turkey's water management policies and HPP process? (7)

**10-** What are responsibilities of stakeholders involved in the HPP process? What sort of relations should be established among them in this process? (5)
**11-** In your opinion, what should an ideal HPP process include in Turkey? (5), (8)
**12-** Do you think whether the whole HPP process of Turkey operates fairly or not? Why? (7), (8)
**13-** Based on Turkey's HPP process, how do you see relations between state, society and environment in Turkey? In other words, how have the relations between them changed in near history? What are your expectations for the future of these relations? **(Broad question, but important, that's why I am planning to ask it towards the end of the interview.) (5), (6), (7), (8)**

**Categorisation of Questions on Table**

**Numbers on the table indicate question numbers of each interview set, showing how they are distributed in terms of main concepts of my research. Since the concepts (and questions) are quite inter-linked, it is impossible to have a clear-cut distinction in this categorisation. It is prepared to demonstrate which issues are intended to be explored through interviews.**

| | Water definition | Distribution | Recognition | Procedures | Social Relations | Nature/Society Relations | General | All EJ dimensions |
|---|---|---|---|---|---|---|---|---|
| Lawyers | 1 | - | 3 | 2,5,7,11,12,13 | 4,8,9,10, 15 | 1,9,10 | 4, 14 | 2,4,6,8,9,10,14 |
| Private Sector | 1 | 4,10 | 3,11 | 3,5,12,13 | 7,8,15, 17 | 1 | 2,6,7,9, 14, 16 | 2,5,7,8,9,15,16 |
| NGOs | 1 | 11 | 10 | 3,5,8,9 | 4,6,13 | 1 | 2,4,12 | 2,3,4,6,7,12 |
| Locals | 1,2 | 4,5 | 2,6,7,9 | 6,8,9,10,13 | 11,15 | 1,2,4 | 3,10,12 14 | 3,8,12,14 |
| DSI | 1 | 2,5,6 | 8,10,12 | 3,7,10,11,12 | 4,10,13, 15 | 1,5 | 4,9,14 | 3,4,15 |
| Local Adm. | 1 | 2,4 | 5 | 3,8,10 | 3,7,9,11 | 6 | 7,12 | 3,6,11,12 |
| Academics | 1 | 4 | 6 | 5 | 7,8,10, 11,13 | 1,13 | 2,3,7,8,9, 12,13 | 2,5,7,8,11,12, 13 |

**Initial Criteria (Issue and/or Keyword) List (to be sought during data analysis)**

**This preliminary list is intended to indicate which issues fall under each environmental justice dimensions. Most of them can also be considered as keywords to be searched during data analysis. List is based on justice chapter (Chapter 3 and Chapter 4), mainly works of Walker (2009, 2012), Schlosberg (2004, 2007, 2013) and Holifield, Porter and Walker (2009). Out of such academic works and my initial review of the Turkey's HPP process, issues which might be relevant to Turkey's hydropower development are identified as follows. The issues and keywords will not be limited to them.**

**Distribution**

- Environmental benefits and environmental damages/risks
    - Water availability
    - Access to water
    - Water use
    - Access to land

    - Tourism
    - Land availability
    - Electricity generated
    - Irrigation achieved
    - Water quality
    - Aquatic Biodiversity
    - Endemic species
    - Construction-related damages (excavations)
    - Greenspace
- Vulnerability
    - Socio-economic and cultural status of the villages
    - Availability to adapt to socio-ecological changes
    - Age, gender, ethnicity, religion and/or culture related vulnerabilities
    - Availability to recover
    - Need of the definition of the 'needs' of the local population. Do they need constructions, or nature?
    - Inter-generational distribution
- Responsibility
    - Are they responsible for the energy dependency?
    - Do they have energy-intense way of living?
    - Macro-scale analysis: Global carbon market, emission distribution, carbon credits, foreign market involvement, scaling down from global to national, national to local.
    - Inter-generational distribution

**Recognition**

- Recognition of differences during decision-making processes
- These differences are centred on age, gender, ethnicity, religion, culture, traditions and economic status.
- Most importantly, in the case of HPP constructions in Turkey, recognition should centre on urban-rural debate and rural cultures should be defined in the policy process.
- How do communities value the nature and projects? Normative analysis of community thoughts and recognition of their needs.

**Procedures**

- Public participation
- Transparency
- Accountability
- Access to information
- Access to legal struggles
- Legal processes
- EIA process
- Land appropriation
- Property rights

- Implementation of court decisions
- Monitoring
- Rights and duties of the companies in water use right agreements and compliances